JHCTECH + WellinTech

Live

Enabling Smart Manufacturing by SCADA and MES

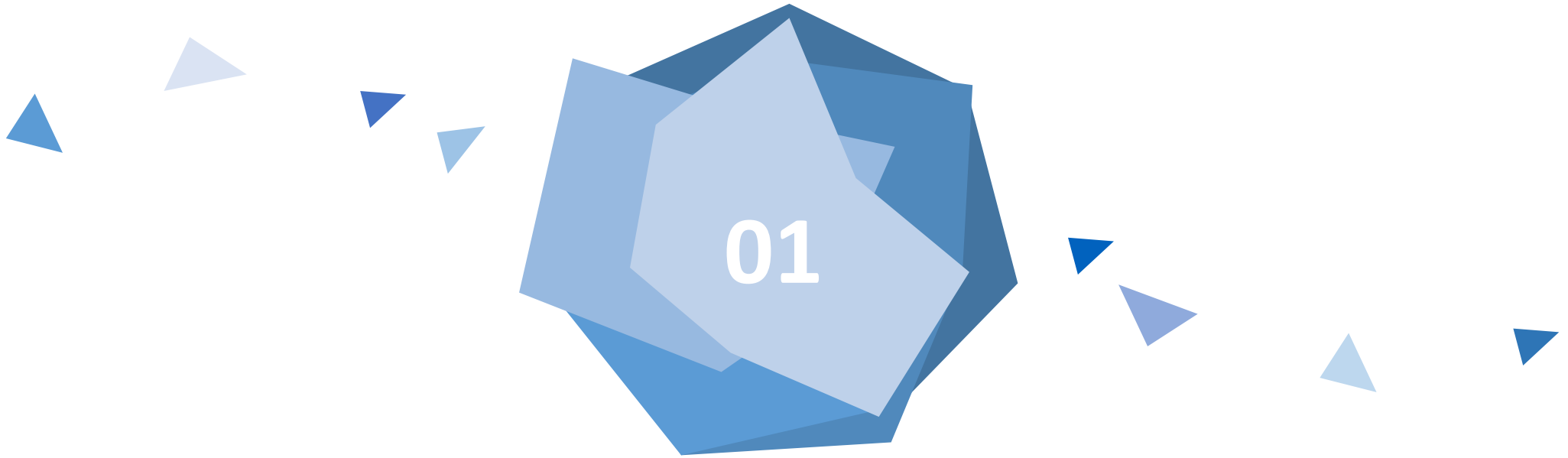
Speakers:

Alex
FAE/PSM
JHCTECH Taipei Office

Shami Barbhuiya
Technical Sales Manager –
Europe & South Asia

Enabling Smart Manufacturing by SCADA and MES

Time	Agenda
16:00 ~ 16:05	**Opening** Chi Chi, Marketing Manager, Shenzhen Office
16:05 ~ 16:30	**Introduction of Wellintech Software products & Smart Manufacturing Solutions** Shami Barbhuiya, Technical Sales Manager -- Europe & South Asia
16:30 ~ 16:55	**Introduction of JHCTECH Products & Smart Manufacturing Solutions** Alex, FAE/PSM, Taipei Office
16:55 ~ 17:05	**Q&A**



Wellintech: Software products & Smart Manufacturing solutions

Shami Barbhuiya, Technical Sales Manager -- Europe & South Asia

WellinTech

ENABLING

SMART MANUFACTURING

BY SCADA AND MES

September 29, 2022

September 30, 2022

For More Information visit

www.wellintech.com

SHAMI BARBHUIYA /王亚
TECHNICAL SALES MANAGER -EUROPE & SOUTH ASIA

ENABLING

SMART MANUFACTURING

BY SCADA AND MES

SCADA: Supervisory Control and Data Acquisition
MES: Manufacturing Execution Systems

CONTENTS

1 **WellinTech Introduction**
Overview of WellinTech

2 **Products Introduction**
- High level introduction on product lines in the context of smart manufacturing stack.
- Product focus: **KingSCADA**. Enabling monitoring and control solution using KingSCADA
- JHCTECH **X** WellinTech SCADA Solution
- A general introduction to MES

3 **SCADA and MES Case**
- HONDA Factory Production Lines Monitoring Case- KingSCADA
- DOOSAN Touch Screen Monitoring & AGV Dispatch System- KingSCADA
- Capacitor Factory MES Case- KingFusion

China's largest industrial automation software company

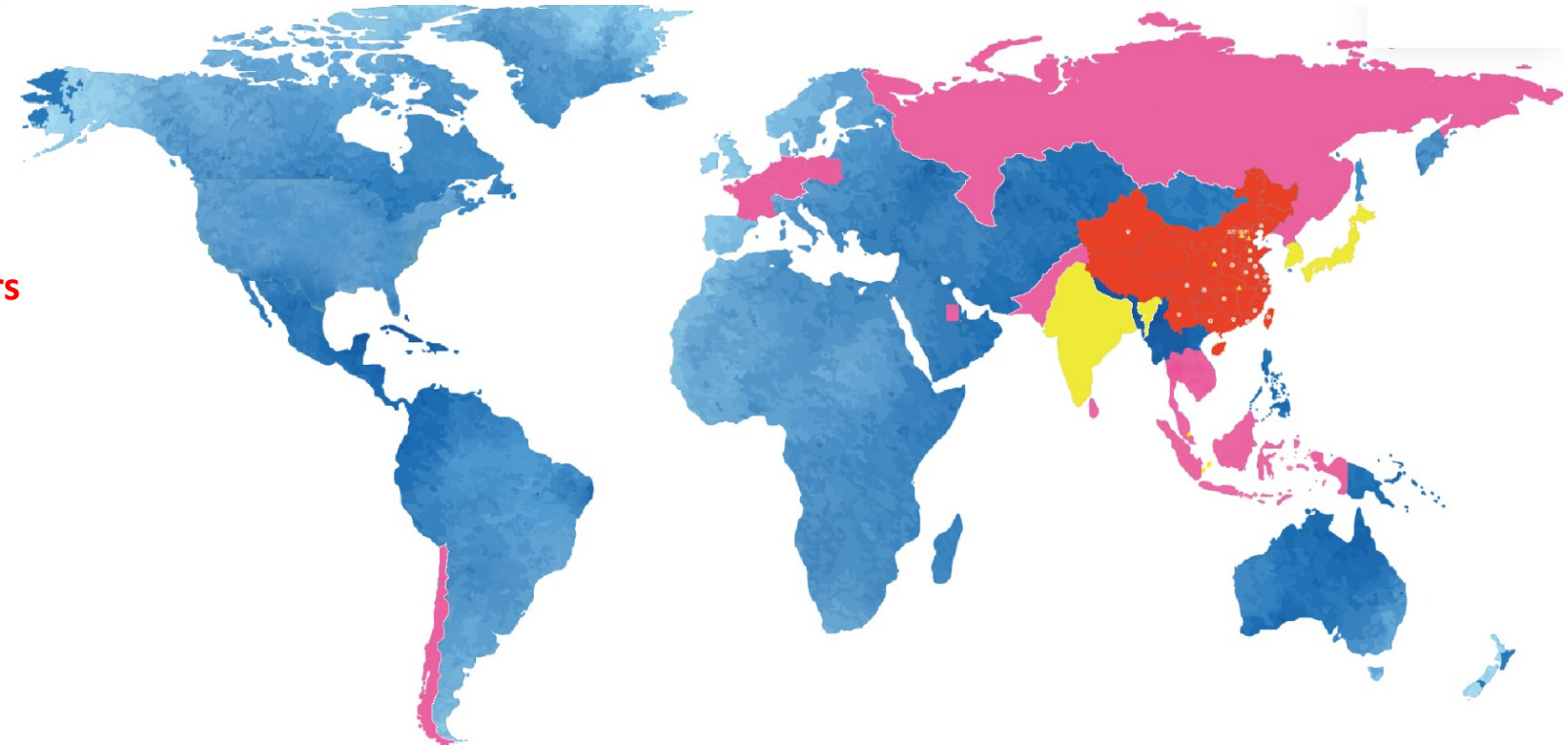
Internationalization Pace

Overseas Branches

- –Japan
- –South Korea
- –Singapore
- –India

Overseas Partners

- South Korea
- India
- Pakistan
- Thailand
- Indonesia
- Malaysia
- France
- Poland
- Brazil
- …



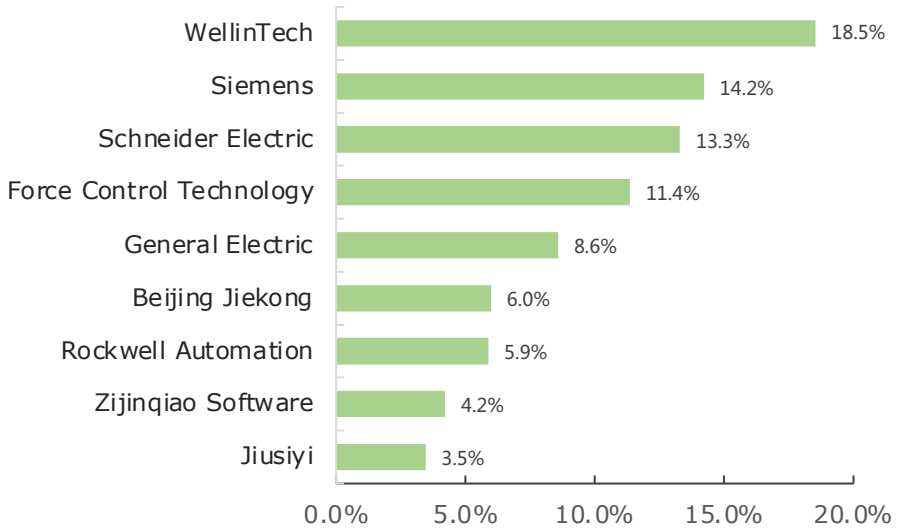
Branch&Offices(35+)

- –Shanghai Branch
- –Guangzhou Branch
- –Nanjing Office
- –Chengdu Office
- –Chongqing Office
- –Kunming Office
- –Wuhan Office
- –Changsha Office
- –Jinan Office
- –Shenyang Office
- –Xi'an Office
- –Xinjiang Office
- –Taiwan Office
- –……

R&D Centers(8)

- –Beijing R&D Center
- –Xi'an R&D Center
- –Tianjin R&D Center
- –Wuhan R&D Center
- –Guangzhou R&D Center
- –Chengdu R&D Center
- –Shenyang R&D Center
- –Nanjing R&D Center

2018 SCADA/HMI China Market Share



Source: ARC Advisory Group

Note: In China, from 2018, the number of software sets stands first, and the market share stand the first for two consecutive years in 2020 and 2021 as well.

2. Products Introduction

High level introduction on product lines in the context of modern manufacturing stack.

Product Lines

MONITORING &CONTROL

MES

TIME- SERIES INDUSTRIAL STORAGE & ANALYSIS

DATA CONNECTIVITY/FORWARDING/CLOUD

KingView

KingSCADA

KingPortal

KingFusion

KingPortal

KingHistorian

KingIOServer

All these products are independent product , can be installed separately in a PC and run separately.

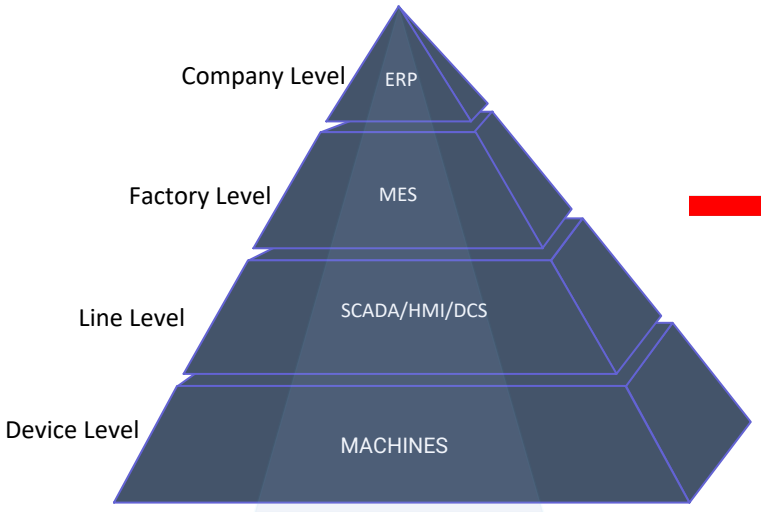
KingView: A Low-End SCADA Platform
KingSCADA: A High-End SCADA Platform
KingPortal: A Web-Based SCADA Platform

KingFusion: A High-End MES Platform
KingHistorian: An Industrial Time-Series Database Historian
KingIOServer: A Data Connectivity Platform

2. Products Introduction

High level introduction on product lines in the context of modern manufacturing stack.

Manufacturing Stack in Modern Factories



A complete automation and information software product line

Product focus: KingSCADA

Edge-to-Cloud Archicture

.....Supporting around 1500 manufactures

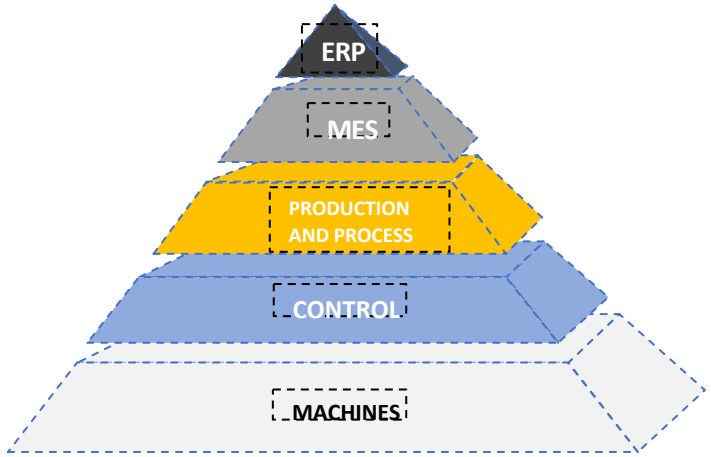
5500+ Communication Protocol Drivers

2. Products Introduction

High level introduction on product lines in the context of modern manufacturing stack.

WellinTech

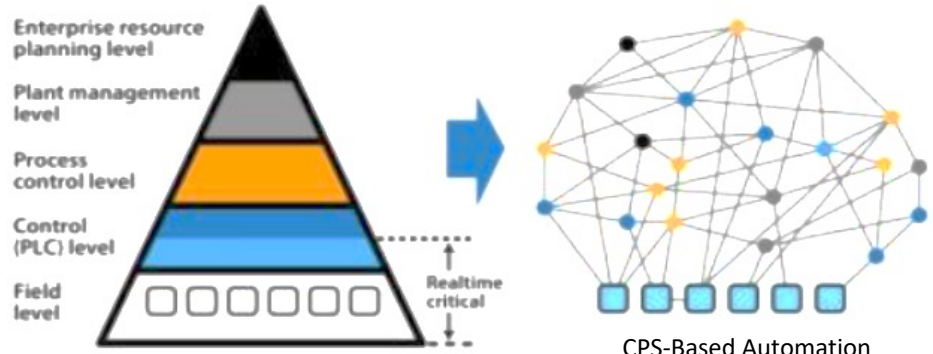
Manufacturing Stack in Today's Factories



Future of Smart Factories/Smart Manufacturing

But we're moving to something new and more connected and efficient! A goal toward sustainable factories...

CPS(Cyber-physical Systems)-based manufacturing is the goal of Smart Factories. It's a new age of smart manufacturing. In the context of manufacturing facilities, we will call it Industrial CPS(ICPS)



Source: Elvis Hozdić "SMART FACTORY FOR INUSTRY 4.0: A REVIEW" International Journal of Modern Manufacturing Technologies ISSN 2067–3604, Vol. VII, No. 1 / 2015

For very edge-level, cyber-physical systems aims to integrate:

- **sensing,**
- **computation**
- **control**
- **communication**

3Cs(Computation, Control, and Communication)

into physical objects and infrastructure, connecting them to the Internet and to each other, enabling a smart and connected ecosystem.

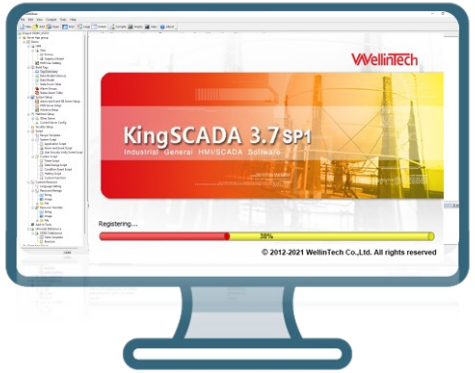
CPS-based factories are a **synergistic approach** to creating a holistic view over smart factories.

KingSCADA Introduction

A High-End Industrial Configurable SCADA Software with 22+ years of R&D History

Main Application Scenarios of KingSCADA

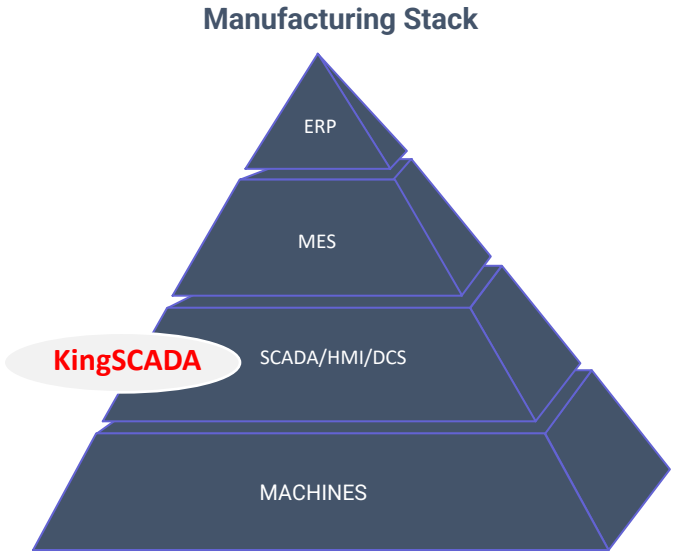
- Monitoring center (station control, production line)
- Centralized control and dispatch center
- Remote dispatch center
- Integrated Monitoring System



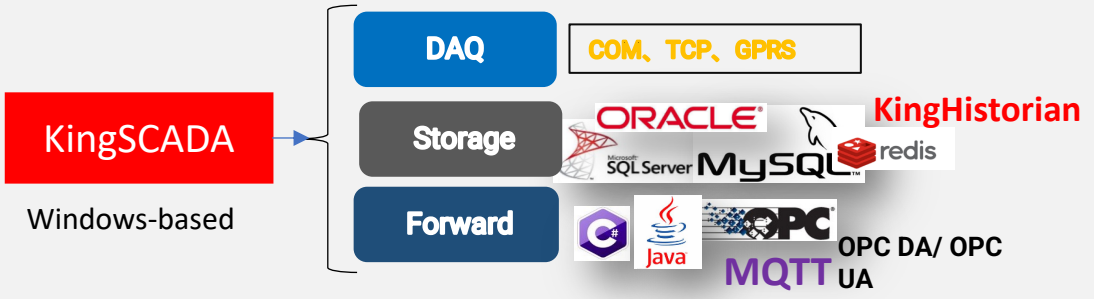
KingSCADA currently has 78,000+ running plants/sites, covering municipal water, electricity, heat, energy, chemical industry, transportation, aviation, military industry, automobile, electronic semiconductor, smart park, clothing, food and medical treatment, household and other industries.

For any given factory, there are three main challenges/steps to implement smart solutions:

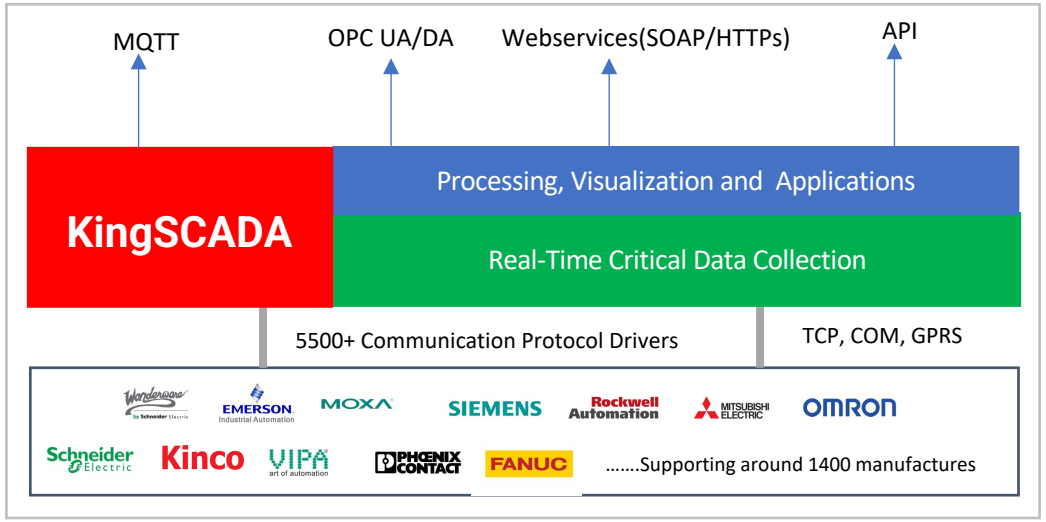
1. **Data Connectivity**
2. **Data Processing, Visualization, and Applications**
3. **Data Integration and Plant Level Execution**

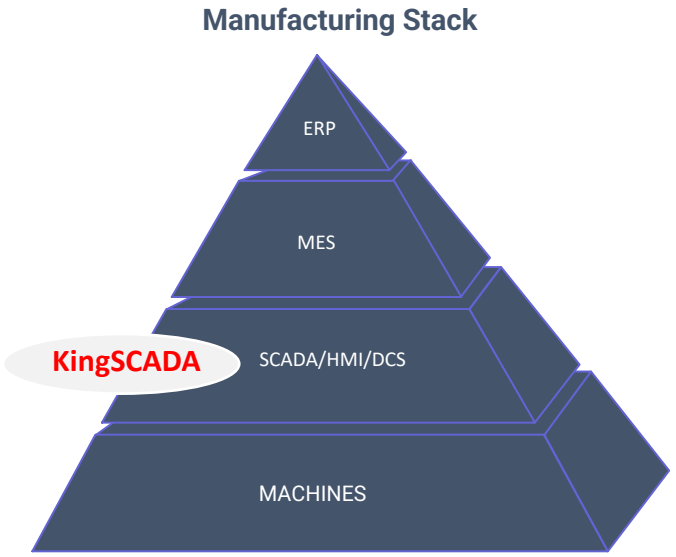


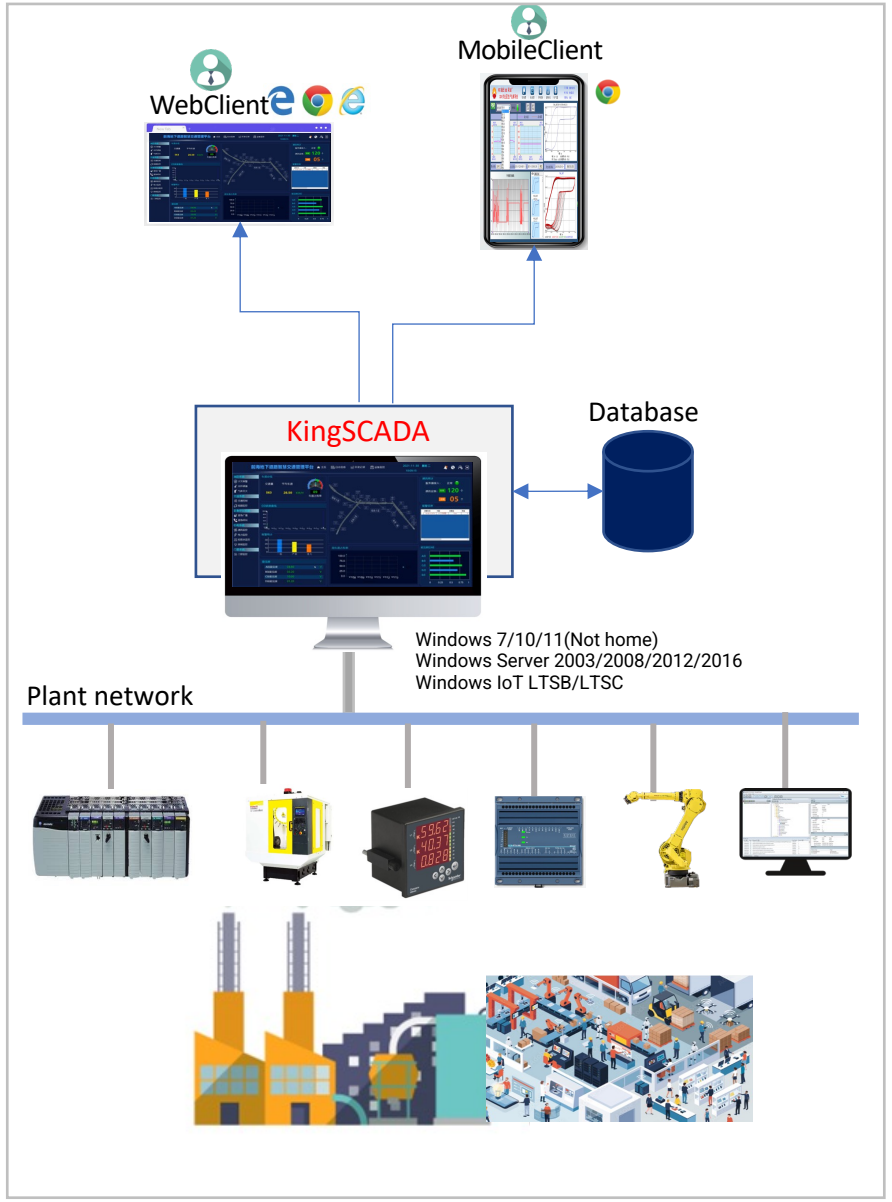
A factory/plant can be represented in this mode(Purdue model)

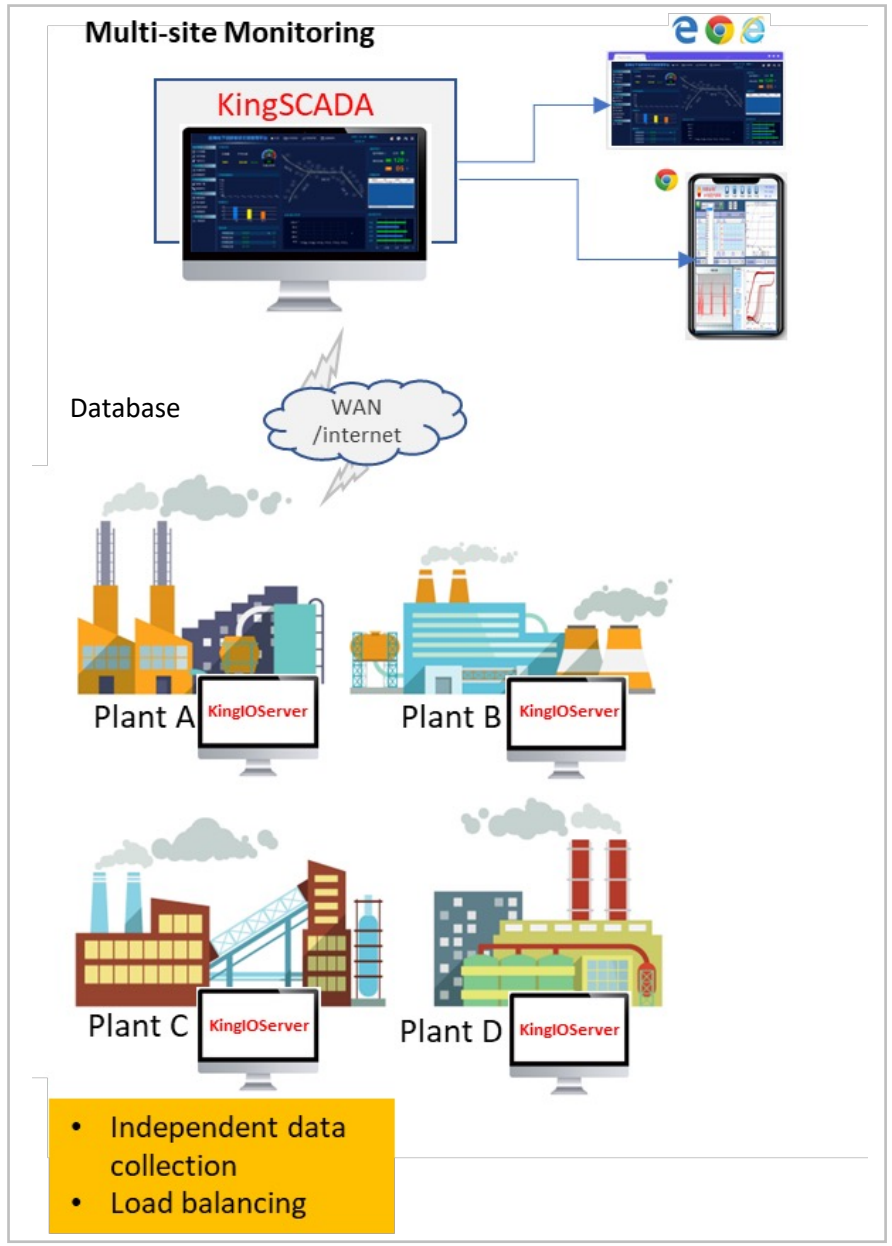


OS:
- Windows 7/10/11(Not Home)
- Windows Server 2003/2008/2012/2016
- Windows IoT LTSB/LTSC







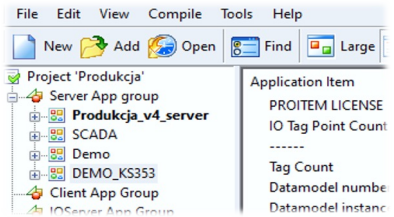


2. Products Introduction

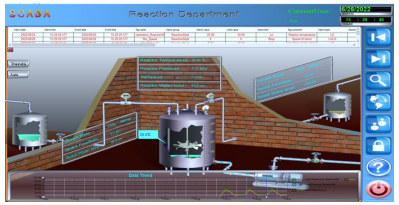
Product focus: KingSCADA

KingSCADA(KS) Top 25 Functions

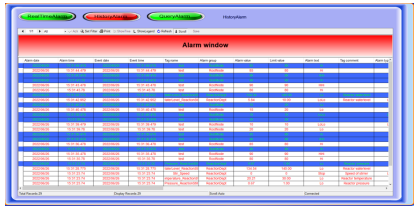
1.Multi-Project Management



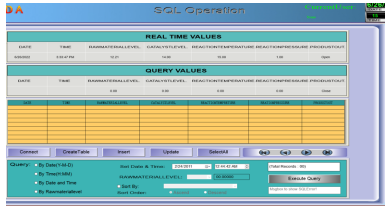
2. Rich Graphics & Animation



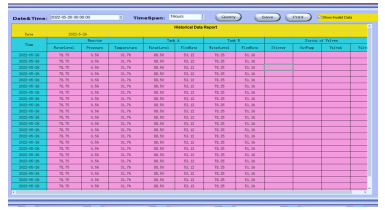
3. Alarm & Event



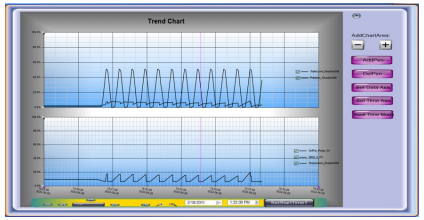
4. History Data Logging



5. Built-in Report Designer

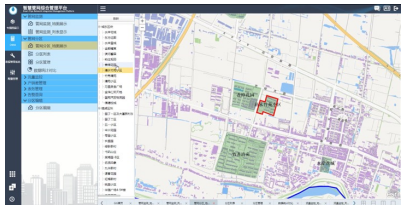


6. Built-in Trend Designer

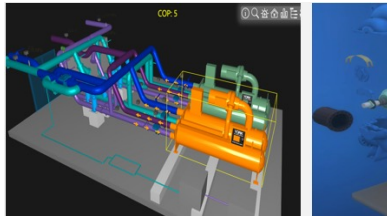


7. E-Charts(Open Source)

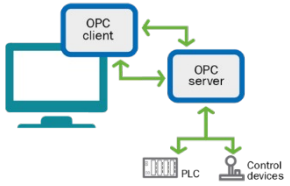
8. GIS(not in KV)



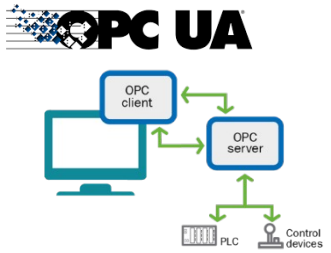
9. 3D(Not in KV)



10. OPC DA(Client-Server)

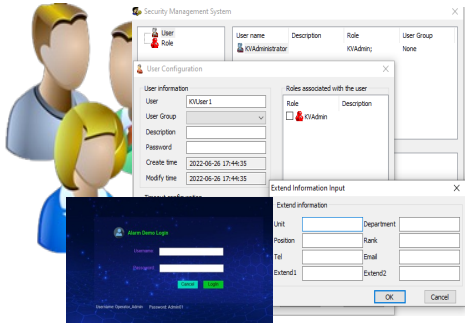


11. OPC UA(Client-Server)

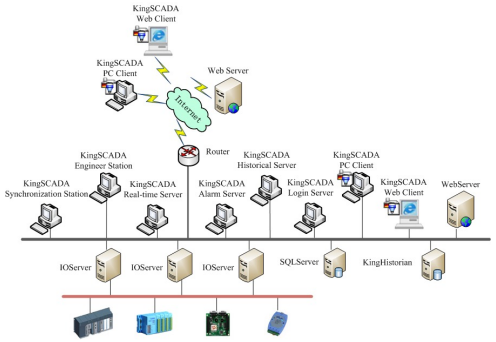


12.Data Acquisition(5500+)

. 13. Security, Users &Role



14. Network Structure(CS/BS)

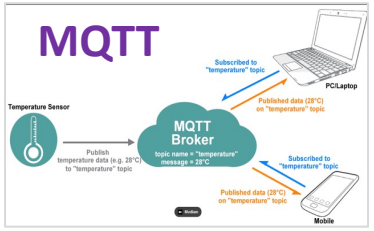


15. Web Publishing(WebClient)

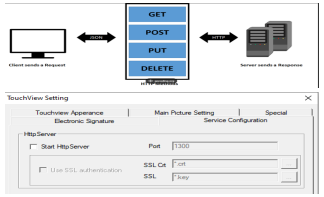
KingSCADA Top 25 Functions

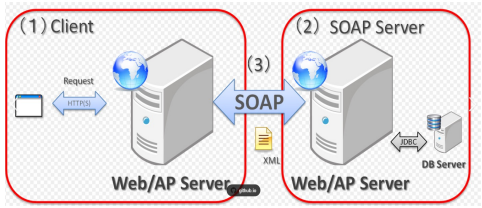
16. MobileClient

17. MQTT

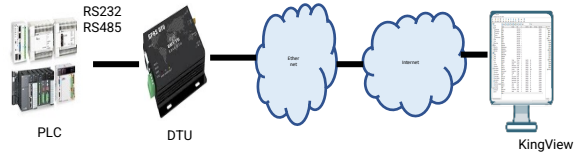


18. WebServices(HTTP Server/RESTFul/SOAP)



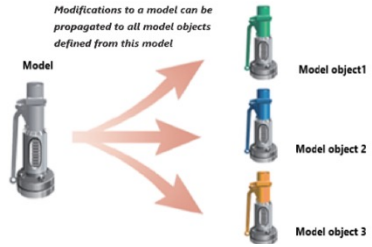


19. GPRS

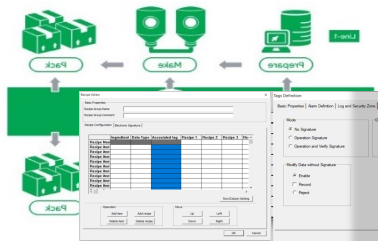


20. SMS& Email

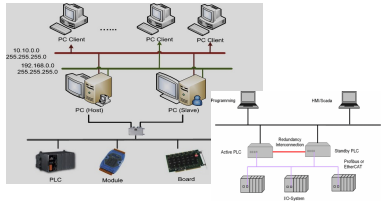
21. Data Model & Graphics Model (Mode-based engineering)



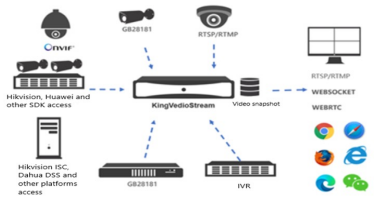
22. Recipe Management



23. Total Redundancy



24.VideoStreaming



Tianmin, Hikvision, etc

25. Open Interfaces/3rd-Part Support

ActiveX/OCX Control
ODBC/OLEDB/ADO etc
API

SCADA Systems

Application layer

WellinTech KingSCADA

server database

JHCTECH WellinTech Kanban application

terminal application

Acquisition layer

data collector

KMDA Series

JHCTECH

Industrial interconnection: Internet , RS232 , RS485 , Modbus , CAN , IO

Field level

JHCTECH

Production equipment

controlling device

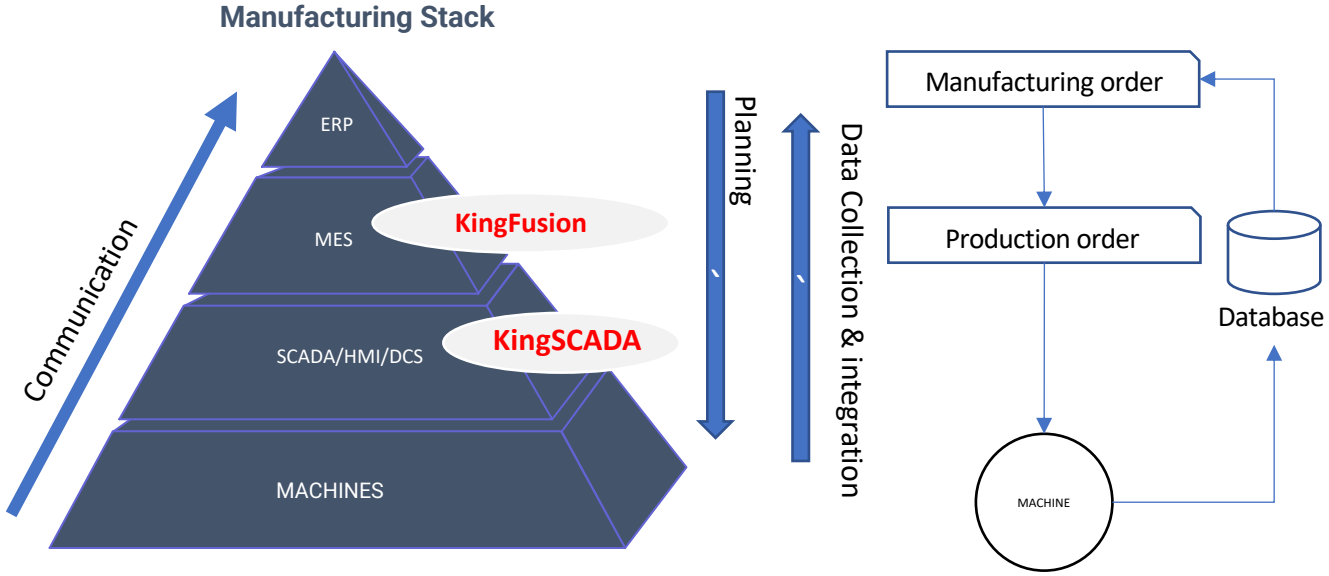
IoT devices

Sensing equipment

SCADA: A system that Monitor & Control processes in a plant

MES: A system that Executes Manufacturing processes in a plant

1. MES is really complex.
2. It's a system that unify your whole plant and executes production/manufacturing. It's plan level IT system.
3. It's a system that resides between SCADA and ERP system/business systems.
4. MES and ERP has a very close integration. You use ERP system to make business decision
5. MES executes your decisions at production level to produce an output.
6. WellinTech has its own MES software platform, called **KingFusion.**



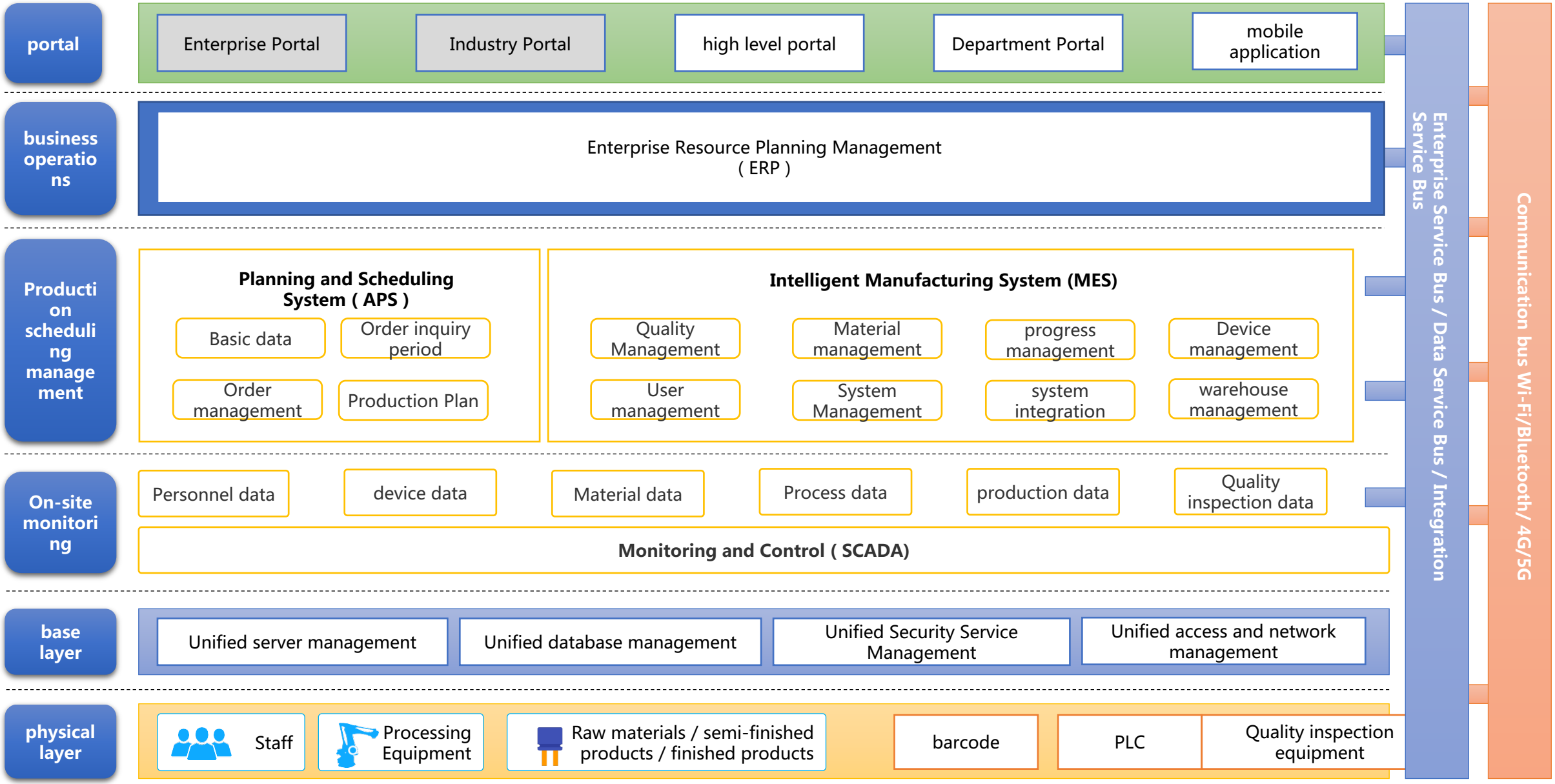
A SCADA system will have

- Data Acquisition
- Reporting
- Trending
- Data Logging
- Alarm&Event(A&E)

Where as a MES system will have

- Quality Management
- Material Management
- Warehouse management
- Device management

Overall Framework



3. SCADA AND MES Case

1. HONDA Factory Production Lines Monitoring Case- KingSCADA
2. DOOSAN Touch Screen Monitoring & AGV Dispatch System- KingSCADA
3. Capacitor Factory MES Case- KingFusion

HONDA'S PRODUCTION LINES MONITORING AND SHIFT MANAGEMENT CENTER---INDIA

WellinTech

www.wellintech.com

The Japanese multinational conglomerate, HONDA, is a public manufacturer of automobiles, motorcycles, and power equipment.

WellinTech implemented the Production Lines Monitoring and Shift Management Centre at HONDA Motorcycles plant in India. The plant used KingSCADA, which is a high-end SCADA system in the product portfolio of WellinTech to meet all requirements for required system. The system is installed in the main server room of the plant.

Date: 2021-12-21

Project Introduction

The need of implementation arose primarily due to the following reasons:

1. End-user was only monitoring Fanuc CNC through MT-LINKi and storing into a NoSQL database.
2. CNCs in the production lines were from different vendors, and end-user was unbale to connect all CNCs into a single platform for an unified lines monitoring.
3. There were also no data monitoring and storage for independent PLCs in the lines and connected edge-devices.
4. The existing system was not unified for their production lines for monitoring and checking the daily shift status of machines. All status verification was manual on screen.
5. The existing system was not scalable, meaning if they needed expand to more lines, they were unable to do so because the existing system is purely JVAVA based dashboard, not a standard system for automotive manufacturing.

End-user required a system that could unify the production lines data into a single platform. They needed a system powerful enough that could connect to all CNCs, PLCs and other I/O modules at the same time to achieve a unified motioning and storage. The major challenge they were facing was to connect CNCs from different vendors into a single platform. Thanks to ***KingSCADA*** *that did the magic. The needed a scalable system in which they could accommodate more lines in the future easily.*

System Specifications

PC

Windows Server 2016

Devices

PLC(Mitsubishi) Qty:17

CNCs(Fanuc, Mitsubishi, Brother) Qty:23

I/O Links(TURCK), Qty: 42

Protocols

MELSEC, CCLINK

FOCAS Ethernet

ModbusTCP

Tags

500+ I/Os

Screens

170

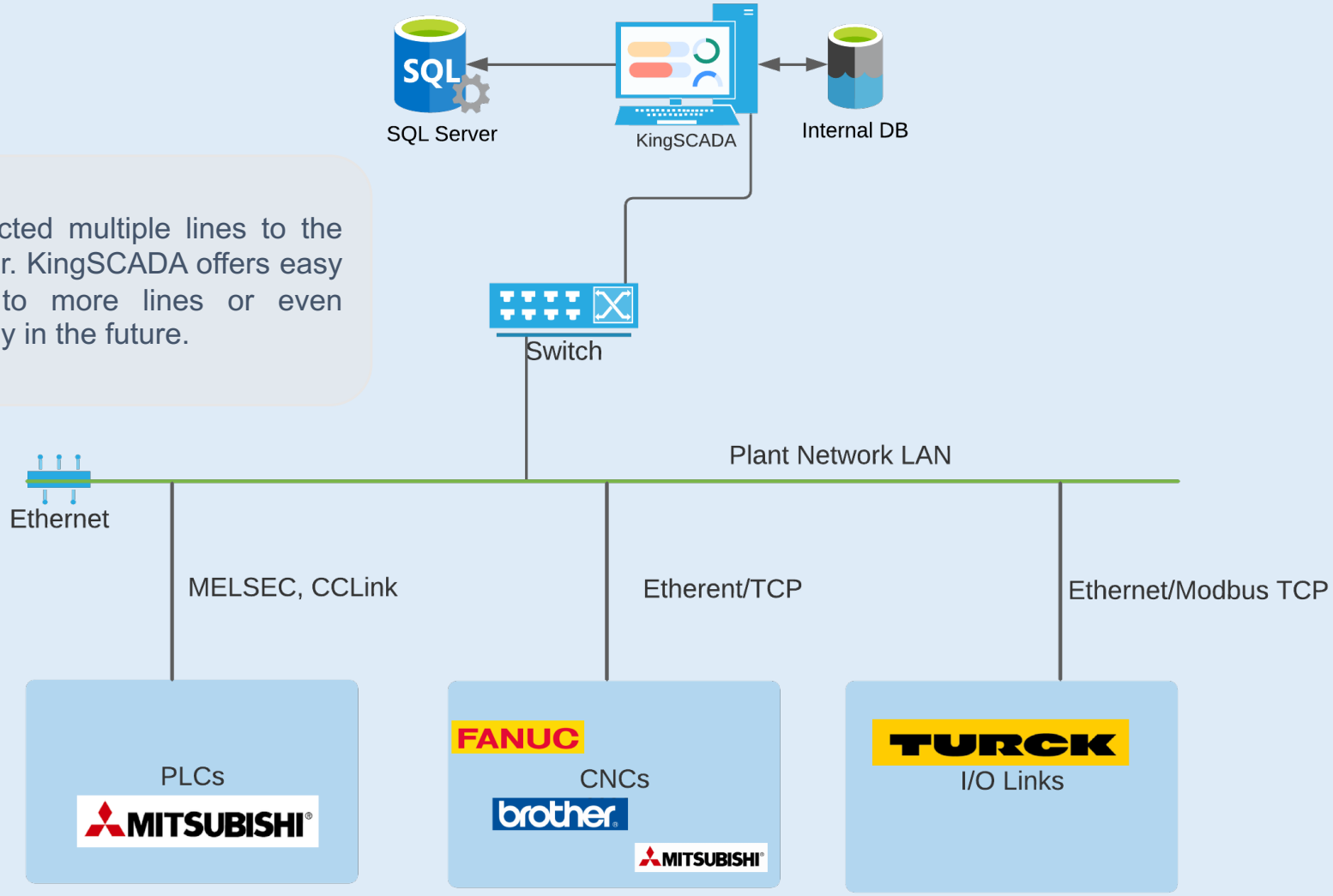
Database

KingSCADA Interal DB

MS SQL Server

System Architecture

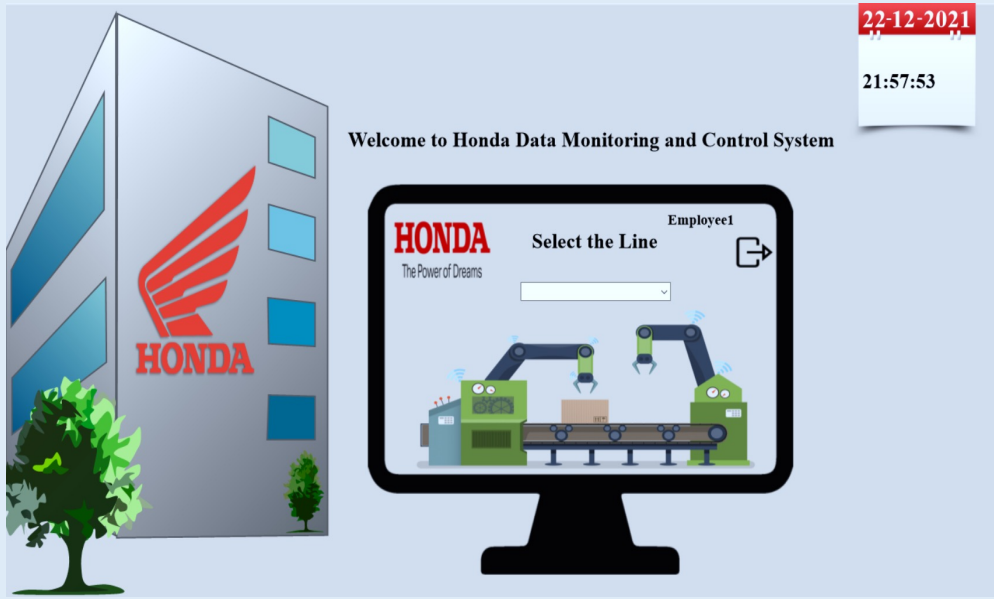
The architecture connected multiple lines to the main KingSCADA Server. KingSCADA offers easy scalability to expand to more lines or even multiple plant area easily in the future.

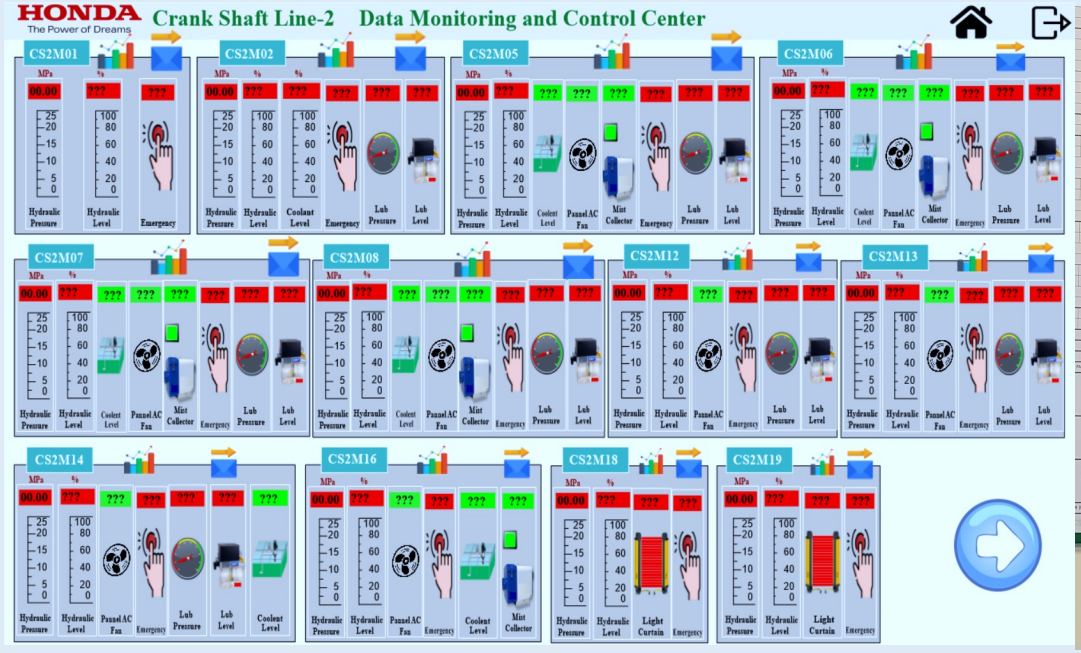


System Screens

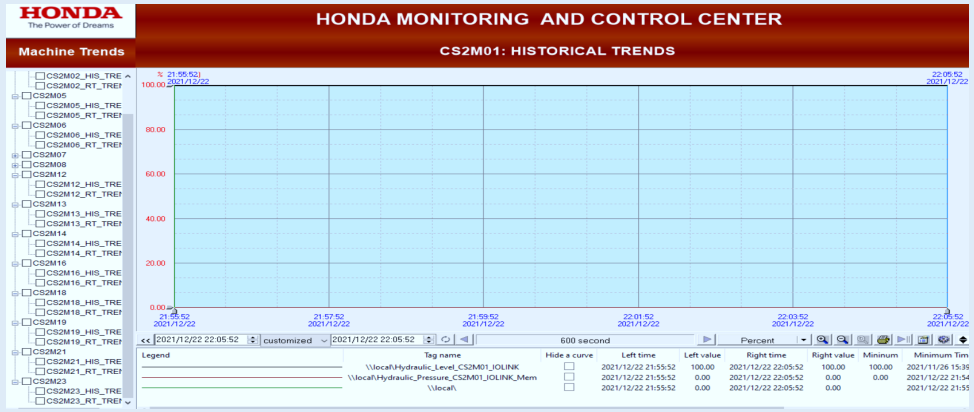
The system consists of 170 screens, displaying different aspect of production lines monitoring such as

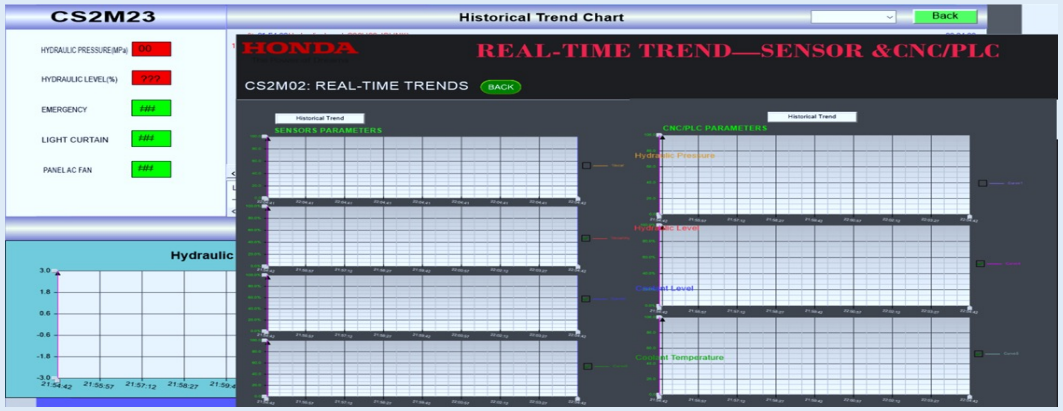
1. Parameter monitoring
2. Real-time trending
3. Historical trending
4. Alarms handling
5. Customized reporting
6. Data archiving/logging
7. Auto email triggering
8. Manual email sending with daily shift status report as attachment

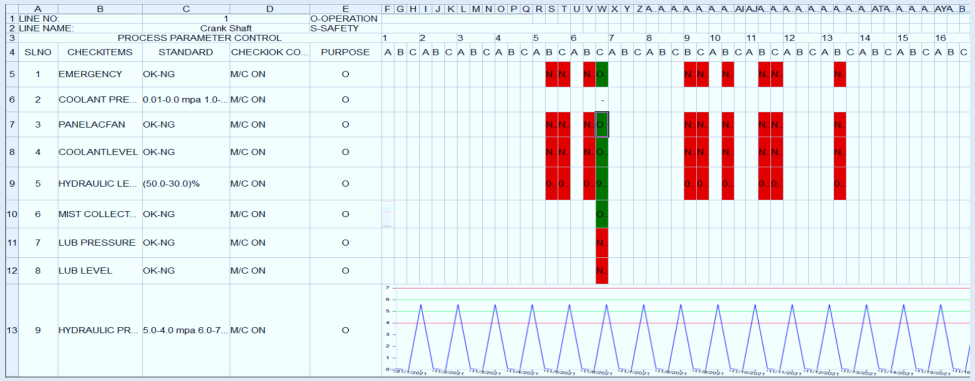


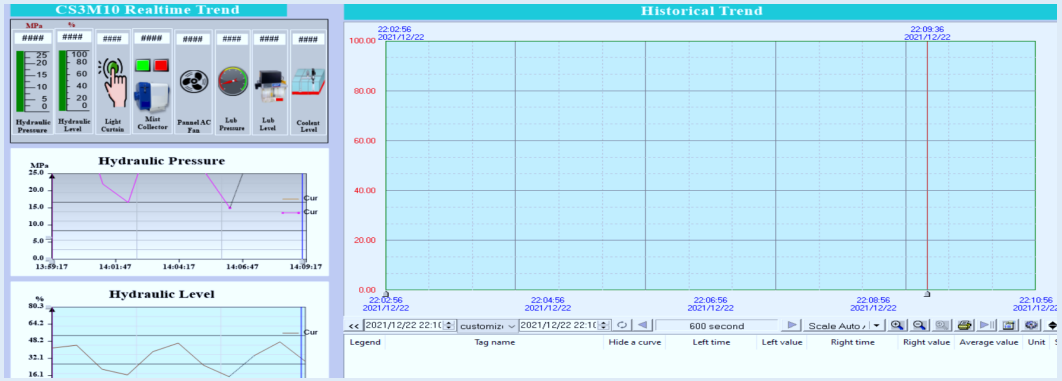


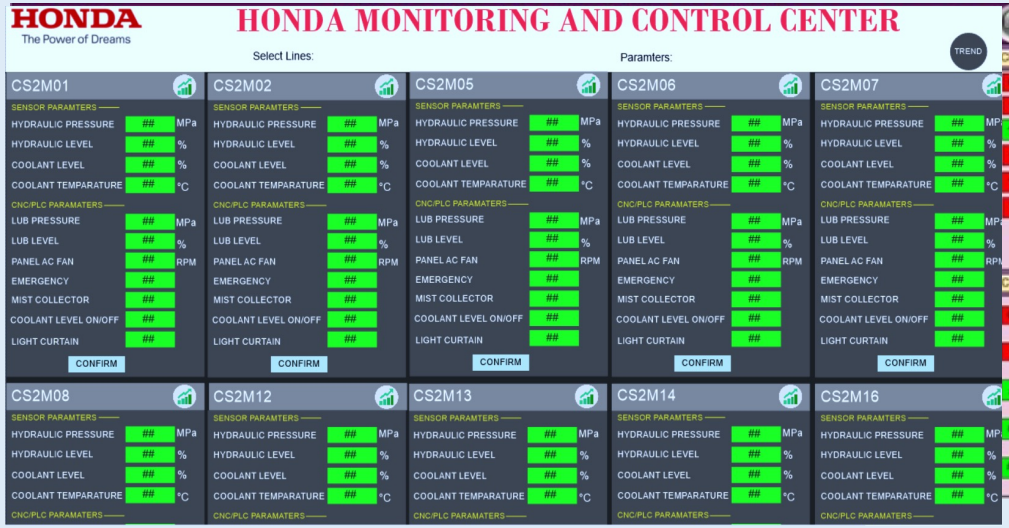
System Screens

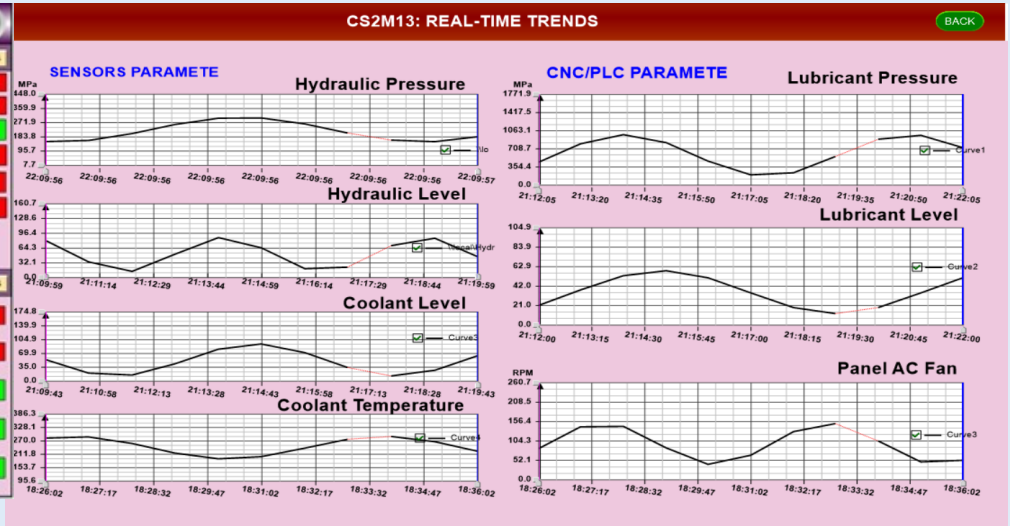












KingSCADA

DOOSAN Solution Case – Forklift Counterweight Production Line

WellinTech

www.wellintech.com

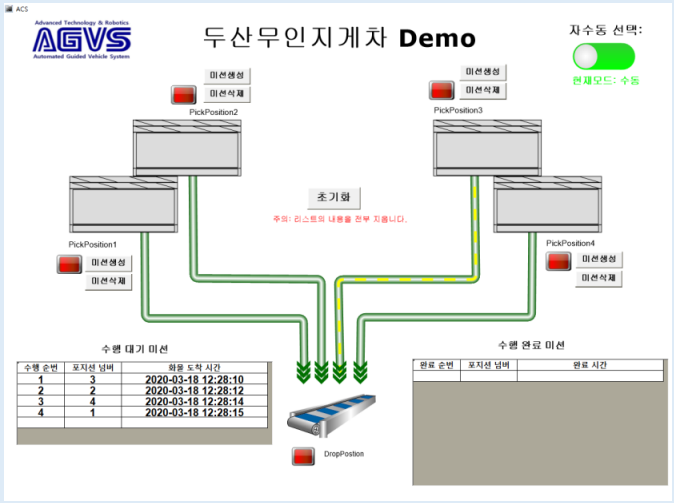
Vertical Touch Screen Monitoring System

(KingSCADA) :

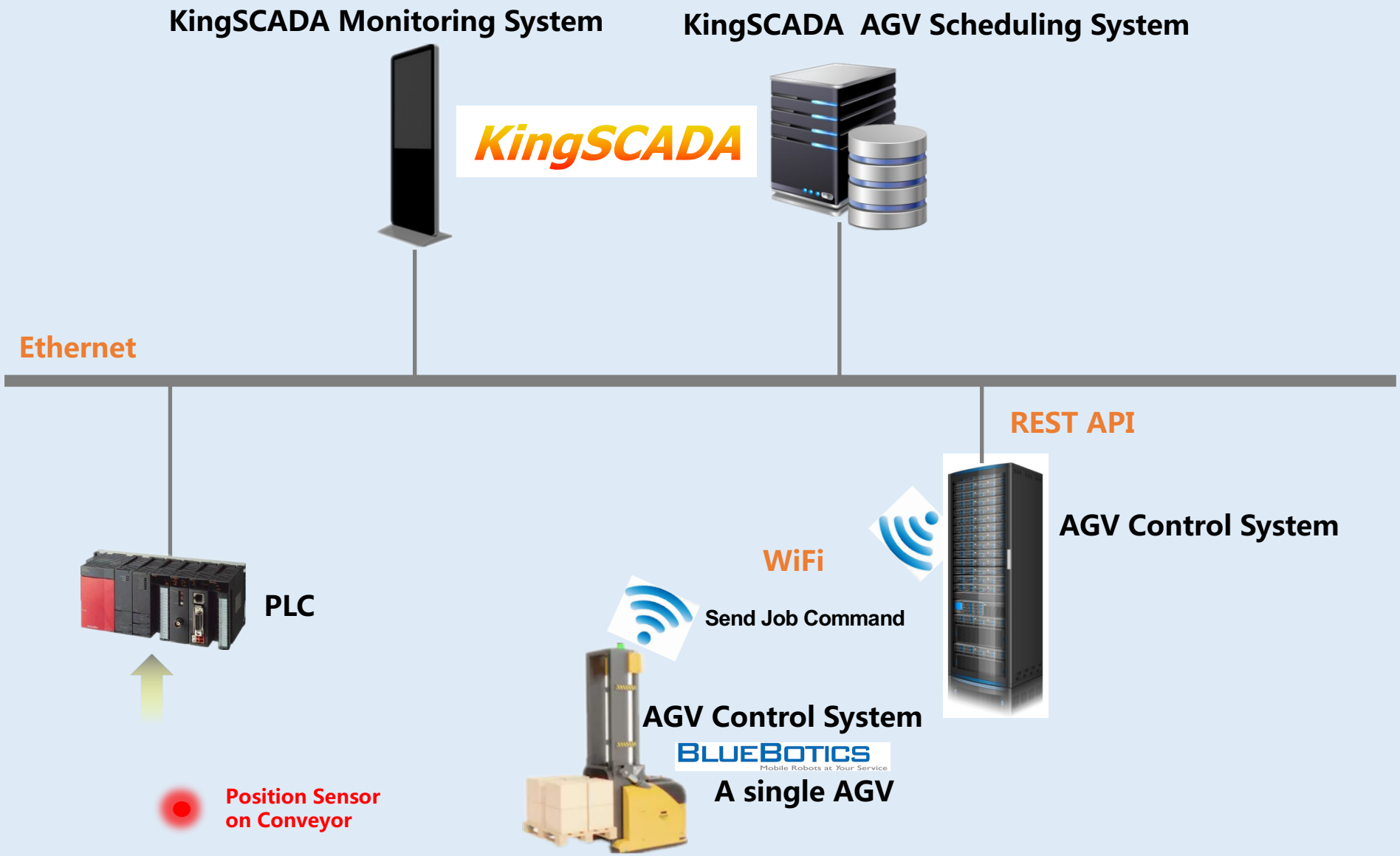
1. Real-time monitoring of AGV coordinates and veichle information
2. Weekly production line display
3. Product location display on production line conveyor belt.
4. Alarm information display

AGV scheduling system(KingSCADA) :

1. AGV dispatch system (KingSCADA):
2. Automatically issue job commands based on sensor signals
3. Manually issue job commands
4. Job records are automatically saved as excel files



System Architcture



KingFusion

MES System for a Capacitor Factory

WellinTech

www.wellintech.com

Solid Capacitor Key Process Flow

crop

nail roll

Wear plastic cover

welding

form into

polymerization

Impregnation

seal

Ageing

stamp

Sorting

External inspection

Tape

finished product

Equipment ledger management
Equipment Repair

- Maintenance registration
- Maintenance record query
- Maintenance Knowledge Base
- Troubleshooting maintenance
- Failure frequency statistics

Spare parts management

- Spare parts replacement record
- Spare Parts Consumption Statistics

Wear parts replacement

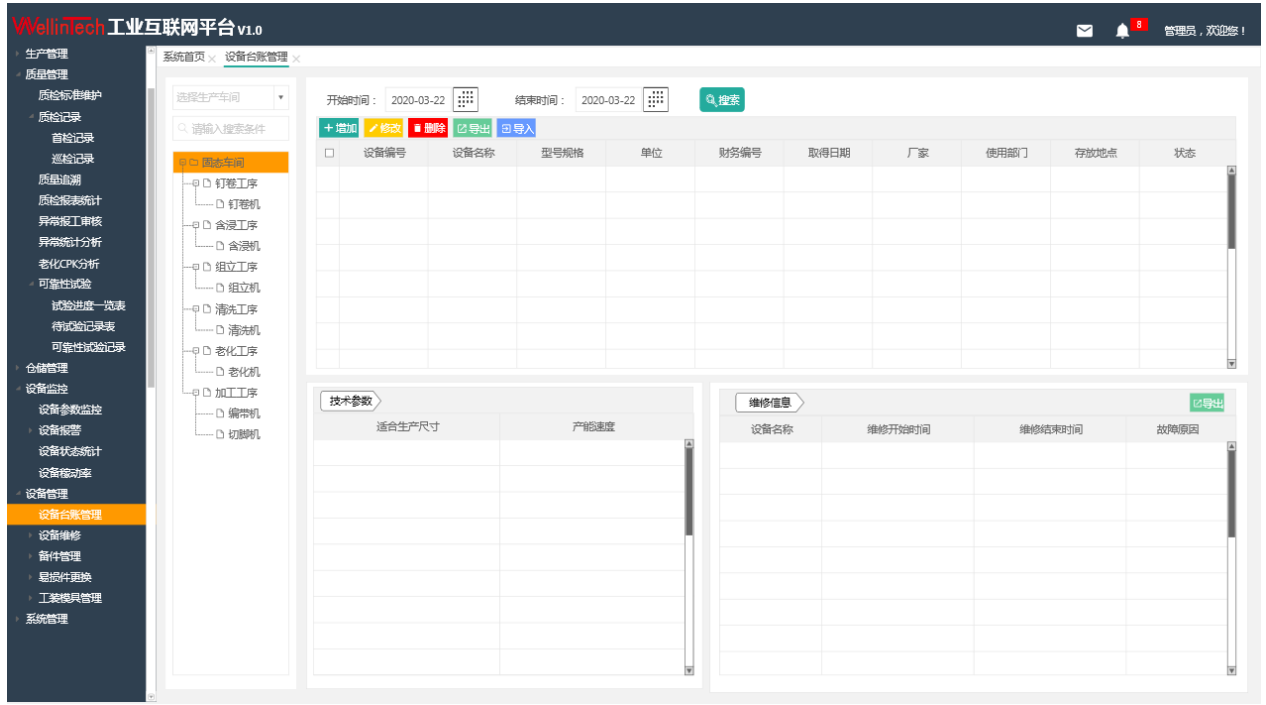
Wearing parts replacement standard

- Wear parts replacement reminder
- Wearing parts replacement record

Tooling and mold management

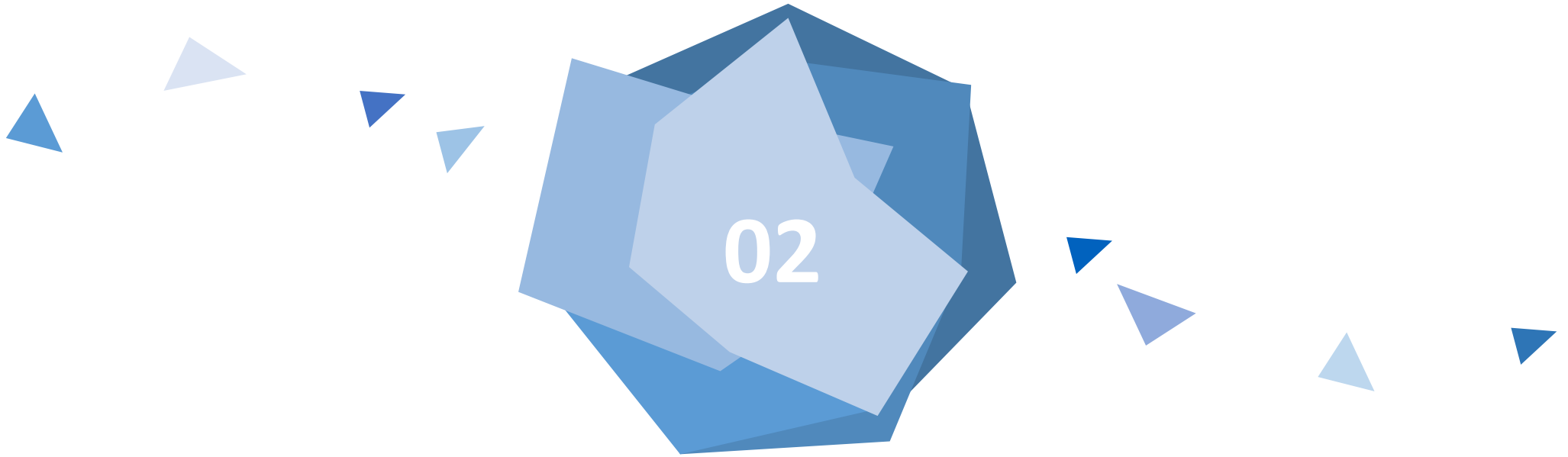
Tooling mold account

- Tooling mold replacement record
- Tooling and mold scrap records



Q&A

THANK YOU!



Introduction of JHCTECH Products & Smart Manufacturing solutions

Alex, FAE/PSM, Taipei Office

JHCTECH

CONTENTS

JHCTECH | IoT Computer Connecting the Dots

Shenzhen JHC Technology Development Co., Ltd.

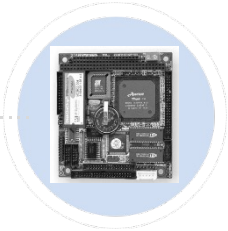
Development

2002

Founded in Shenzhen

2005

Successfully launched the first low-power motherboard



2007

Established Branches

2008

Successfully launched the first fanless industrial computer– FEBC-3510

2009

Established three market directions for intelligent systems: Smart Infrastructure, Smart Services, Smart Manufacturing

2011

Passed the ISO-9001 international quality system certification

2014

Awarded as “National High-tech Enterprise”

2015

Started business journey on the global market

2016

Launched ALAD Series Panel PC and Industrial Display.

Gain lots of software copyrights and utility model patent

2017

Launched KMDA Series Embedded Box PC

2018

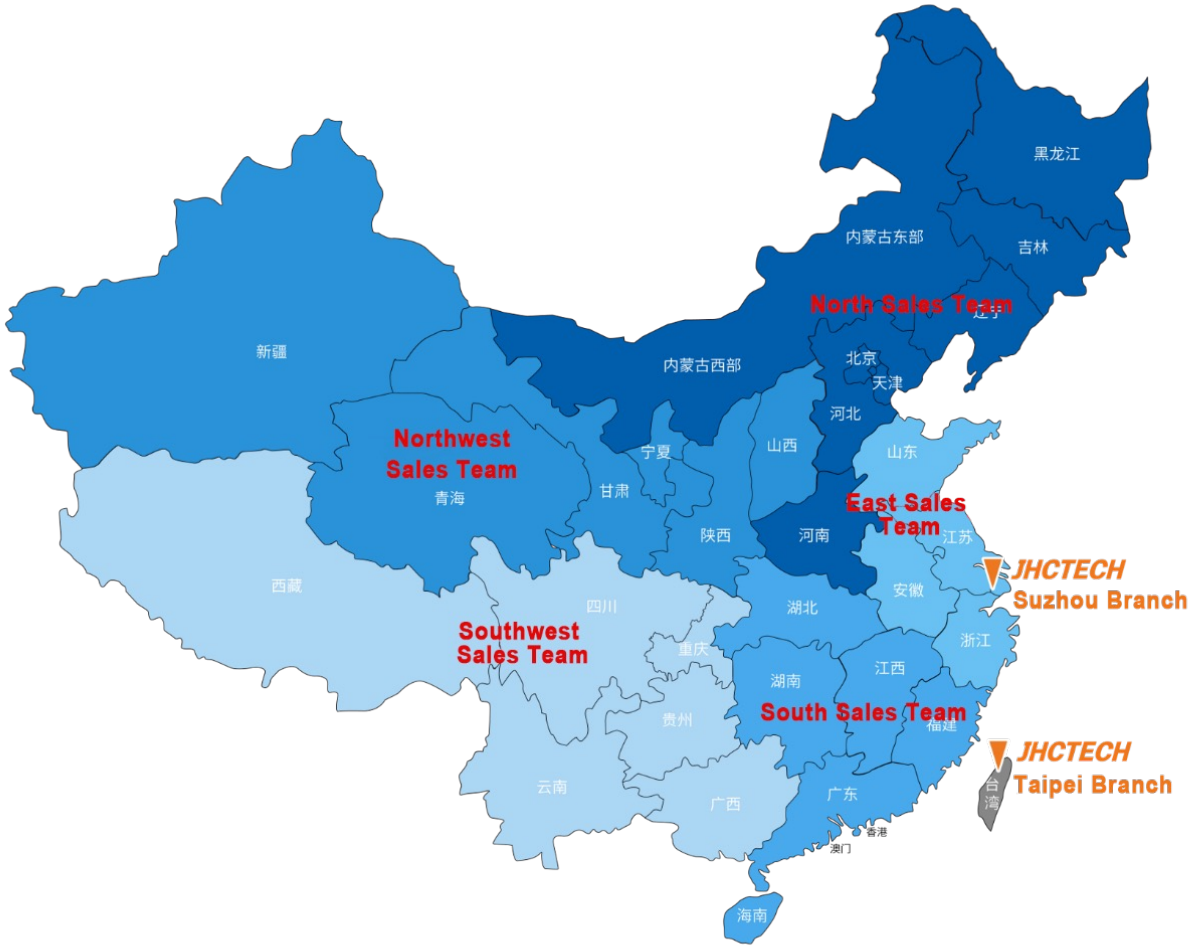
Launched BRAV Series AI Edge Computing System

- Intel® x86 Platform
- AI Module/AI Product

2020

1. Established Taipei Branch
2. Established Suzhou Branch
3. Successfully launched KGEC Series for motion control in automation

Domestic Sales Network



- Five Region
- Professional Sales Team
- Excellent Engineering Team
- Excellent Agent Team
- Sales achievements increased by 52%

Global Sales Network

- Global Marketing
- Professional Sales Team
- Excellent Engineering Team
- Overseas Agent (50+)
- Sales achievements increased by 11%

JHCTECH



Empower Thousands of Industries



IoT Computer
Connecting the Dots

ALAD SIGM JAVS BRAV

KGEC KMDA PADR SBC

JHCTECH PRODUCTS

Software \ Middleware \ Algorithm \ Operating System

Windows UOS 麒麟 Linux BIOS UEFI preempt 实时系统 xenomai VxWorks WIND RIVER intel OpenVINO NVIDIA CUDA neuware sdk 寒武纪

AI chip manufacturers

Cambricon 寒武纪 SOPHGO 算能 Rockchip 瑞芯微电子 NVIDIA

CPU Platform

intel 龙芯中科 LOONGSON TECHNOLOGY 国产向>> Phytium飞腾

www.jhctechnology.cn

Standard Product (8 series, nearly 400 products on sale)

ALAD Series
Fanless Panel PC & monitor

KMDA Series
Fanless Box PC

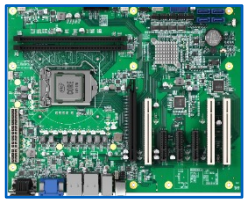
BRAV Series
AI Edge Computing System

SIGM Series
Fanless In-Vehicle rugged PC

WPPC Series
Rugged Waterproof Panel PC

KGEC series
Edge Controller

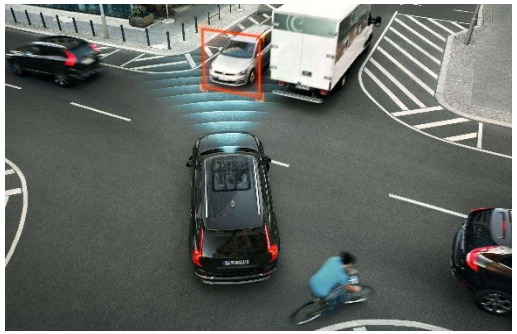
PADR series
Embedded Box pc



SBC series
Embedded single board Computers

Application

- Intelligent Transportation System



- V2X

- Industrial Automation

- Smart Security

- Smart Healthcare

- Smart Warehouse

- Energy and Environment Protection

- Smart Factory

Intel® x86 Platform

AI Module （ NVIDIA, Cambricon, SOPHGO ）

China CPU Platform (Loongson & Phytium)

JHCTECH | IoT Computer Connecting the Dots

JHCTECH Products

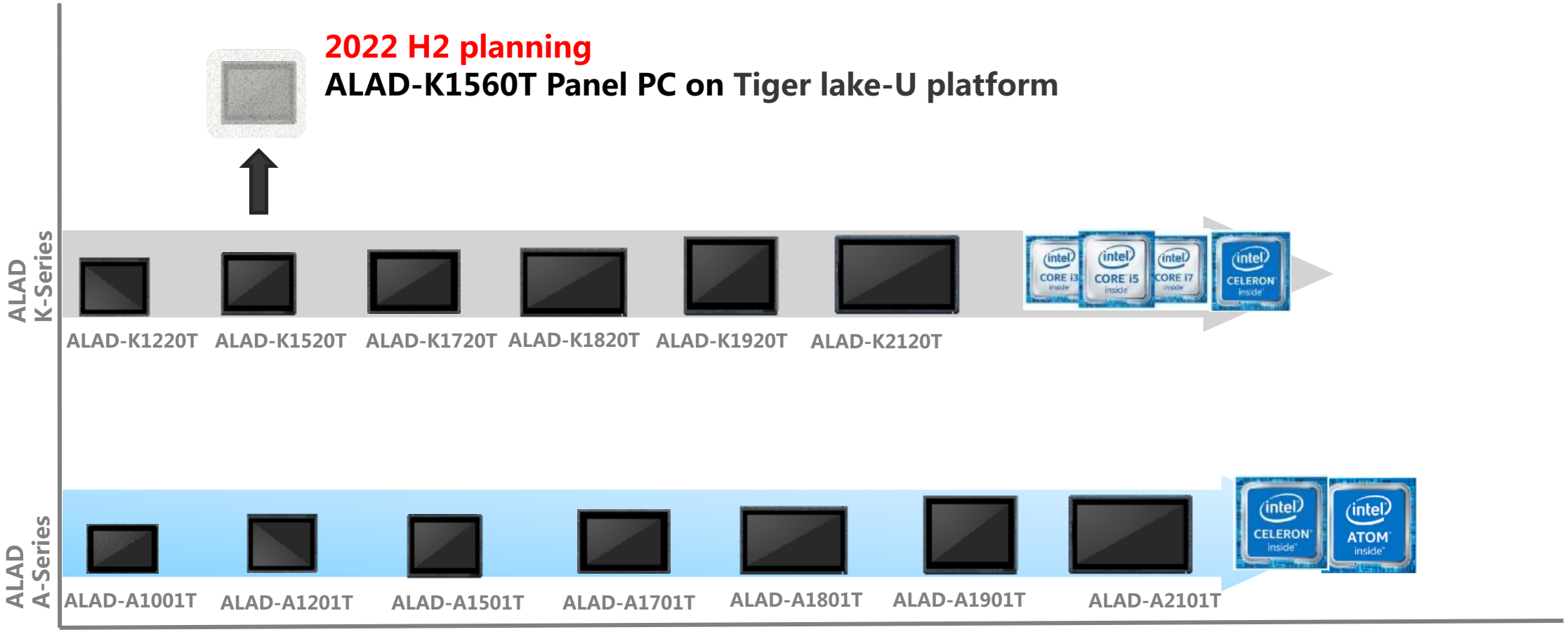
ALAD Series

KMDA Series

Industrial Panel PC

10.1 " -21.5 "

ALAD Panel PC Series - Product Roadmap



Product Highlights

Multiple Interfaces

- Use the EI/O composite interface developed by JHCTECH, which can connect expansion cards with different expansion functions (such as PCI or PCIe bus expansion cards, etc.)
- K series panel, 15 inch, 19 inch, 21.5 inch can support 1* PCI or 1* PCIe 3.0 (x4 slot x1 signal) expansion slot.

Industrial Standard

- Long-life LCD screen, LED backlight is industrial grade 50Kh
- Wide temperature operation, suitable for different industrial environments

Product Highlights

Ingenious Design

- Front panel is IP65 rating, fanless heat dissipation design
- All aluminum die-casting, streamlined design, sturdy and reliable
- With Flexible hidden panel mounting buckle, support panel mounting, VESA mounting, rack mounting

Panel Mounting

VESA

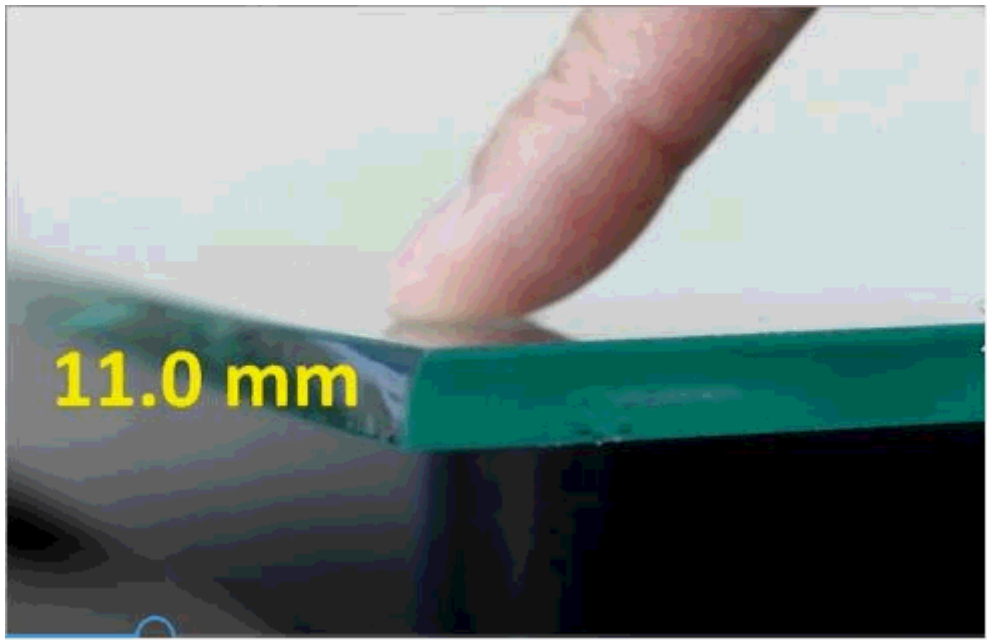
Rack mounting

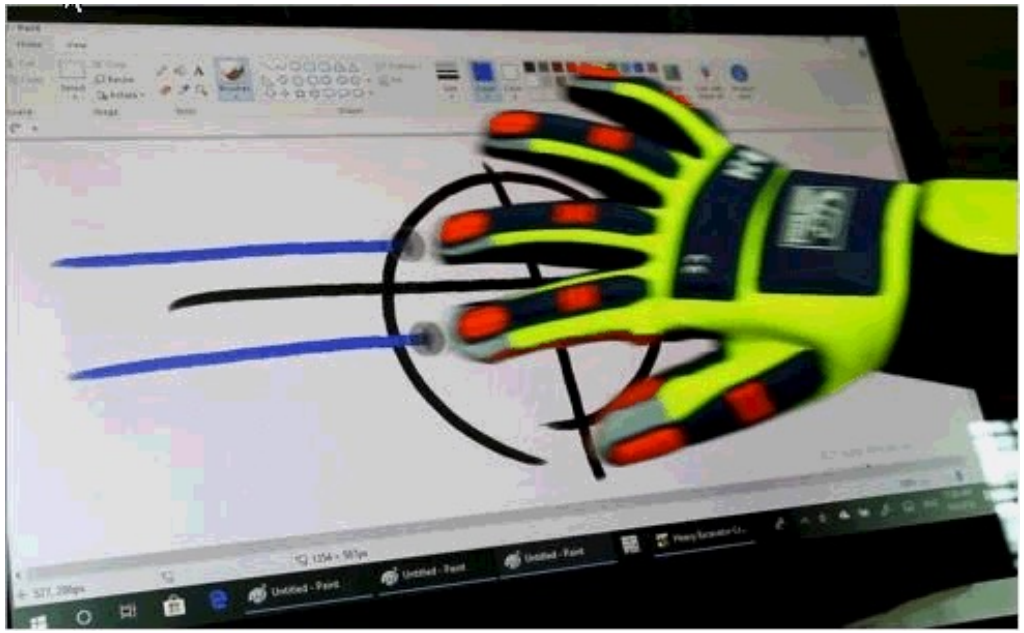
Product Highlights

Anti-disturbance, Sensitive to Touch

- The resistive touch chip of K series products is directly laid on the motherboard, with higher stability.
- The capacitive touch screen uses Heruiya industrial-grade touch chip, it provides customized FW programs for different electromagnetic operating environments.
- Can be touched with rubber gloves and is waterproof, and the thickness of the outer glass cover can reach 10-11mm.

Multi Touch Screen





Product Highlights

EMC CE and FCC Certified

BST A RELIABLE TESTING FOR TRUST

Certificate of Compliance

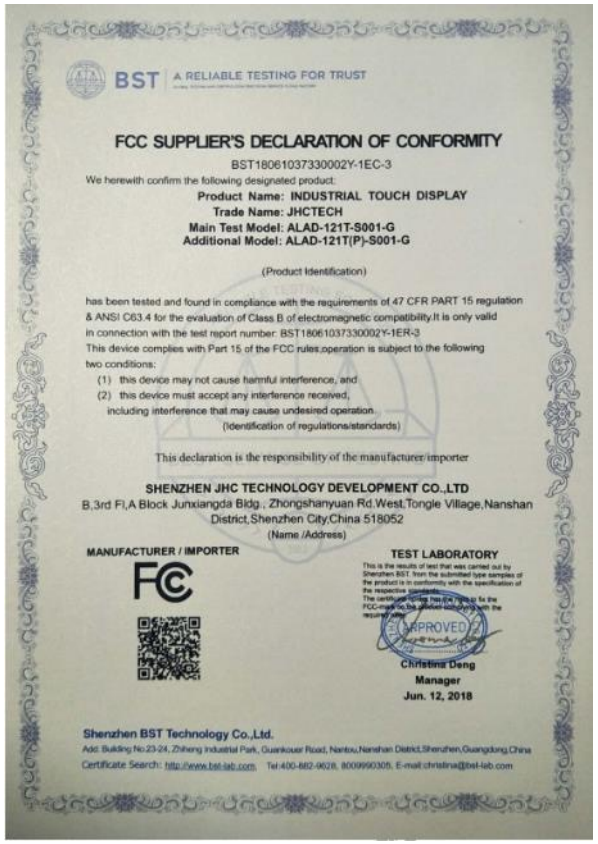
Certificate No.	BST18061037330002Y-1EC-1
Applicant	SHENZHEN JHC TECHNOLOGY DEVELOPMENT CO.,LTD B,3rd Fl,A Block Junxiangda Bldg., Zhongshanyuan Rd.West,Tongle Village,Nanshan District,Shenzhen City,China 518052
Manufacturer	SHENZHEN JHC TECHNOLOGY DEVELOPMENT CO.,LTD B,3rd Fl,A Block Junxiangda Bldg., Zhongshanyuan Rd.West,Tongle Village,Nanshan District,Shenzhen City,China 518052
Product Name	INDUSTRIAL TOUCH DISPLAY
Trade Name	JHCTECH
Main Test Model	ALAD-121T-S001-G
Additional Model	ALAD-121T(P)-S001-G
Test Standard	EN55032:2015 EN61000-3-2:2014 EN61000-3-3:2013 EN55024:2010/A1:2015
As shown in the Test Report No.	BST18061037330002Y-1ER-1

The EUT described above has been tested by us with the listed standards and found in compliance with the council EMC directive 2014/30/EU. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.
The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production.

APPROVED

Christina Deng
Manager
Jun. 12, 2018

Shenzhen BST Technology Co.,Ltd.
Add: Building No.23-24, Zhiheng Industrial Park, Guankouer Road, Nantou,Nanshan District,Shenzhen,Guangdong,China
Certificate Search: http://www.bst-lab.com Tel:400-862-9628, 8006990305, E-mail:christina@bst-lab.com



BST A RELIABLE TESTING FOR TRUST

FCC SUPPLIER'S DECLARATION OF CONFORMITY

BST18061037330002Y-1EC-3

We herewith confirm the following designated product:

Product Name: INDUSTRIAL TOUCH DISPLAY
Trade Name: JHCTECH
Main Test Model: ALAD-121T-S001-G
Additional Model: ALAD-121T(P)-S001-G

(Product Identification)

has been tested and found in compliance with the requirements of 47 CFR PART 15 regulation & ANSI C63.4 for the evaluation of Class B of electromagnetic compatibility.It is only valid in connection with the test report number: BST18061037330002Y-1ER-3
This device complies with Part 15 of the FCC rules,operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
(Identification of regulations/standards)

This declaration is the responsibility of the manufacturer/importer

SHENZHEN JHC TECHNOLOGY DEVELOPMENT CO.,LTD
B,3rd Fl,A Block Junxiangda Bldg., Zhongshanyuan Rd.West,Tongle Village,Nanshan District,Shenzhen City,China 518052
(Name /Address)

MANUFACTURER / IMPORTER

TEST LABORATORY

APPROVED

Christina Deng
Manager
Jun. 12, 2018

Shenzhen BST Technology Co.,Ltd.
Add: Building No.23-24, Zhiheng Industrial Park, Guankouer Road, Nantou,Nanshan District,Shenzhen,Guangdong,China
Certificate Search: http://www.bst-lab.com Tel:400-862-9628, 8006990305, E-mail:christina@bst-lab.com

Wide Voltage DC Power Supply

DC 9~36V wide power input

ALAD-A1001T Specification

Model No.	CPU & Memory	Touch	LCD	WEB Camera	I/O & Power
ALAD-A1001T-S001	Intel® Celeron J1900 4GB DDR3L	5 wire resistive touch	350cd/m² 15000h	N/A	1*HDMI, 1*Audio out, 2*COM, 4*USB, 2*LAN, 1*Mini PCIe, 1*2.5” SATA bay, 1*mSATA, 2*2W Speaker, DC 9~36V
ALAD-A1001T-S002				1*500M	
ALAD-A1001T-T001			500cd/m² 50000h	N/A	
ALAD-A1001T-T002				1*500M	
ALAD-A1001T(P)-S001		Projected capacitive touch	350cd/m² 15000h	N/A	
ALAD-A1001T(P)-S002				1*500M	
ALAD-A1001T(P)-T001			500cd/m² 50000h	N/A	
ALAD-A1001T(P)-T002				1*500M	

ALAD-K1220T Specification

Model No.	CPU	Touch	LCD	I/O & Power
ALAD-K1220T-T001	I3-6100U/I3-7100U	5 wire resistive	500cd/m² 50000h	1*HDMI, 2*COM, 5*USB, 2*LAN, 1*Mini PCIe, 2*3W Speaker, 1*2.5” SATA Bay, 1*M.2, DC 9~36V
ALAD-K1220T(P)-T001		Projected capacitive		
ALAD-K1220T-T002	I5-6200U/I5-7200U	5 wire resistive		
ALAD-K1220T(P)-T002		Projected capacitive		
ALAD-K1220T-T003	I7-6500U/I7-7500U	5 wire resistive		
ALAD-K1220T(P)-T003		Projected capacitive		
ALAD-K1220T-T004	Celeron-3855U/3865U	5 wire resistive		
ALAD-K1220T(P)-T004		Projected capacitive		

NOTE: optional 15”, 17”, 19”

ALAD-K1820T(P) Specification

Model No.	CPU	Touch	LCD	I/O & Power
ALAD-K1820T(P)-T001	I3-6100U/I3-7100U	Projected capacitive	500cd/m^2 50000h	1*HDMI, 2*COM, 5*USB, 2*LAN, 1*Mini PCIe, 2*3W Speaker, 1*2.5” SATA Bay, 1*M.2, DC 9~36V
ALAD-K1820T(P)-T002	I5-6200U/I5-7200U			
ALAD-K1820T(P)-T003	I7-6500U/I3-7500U			
ALAD-K1820T(P)-T004	Celeron-3855U/3865U			

NOTE: optional 21.5”

Target Market

Kiosk

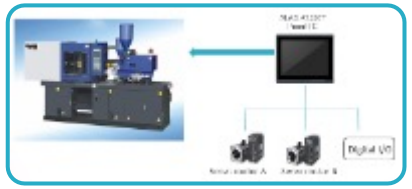
Warehousing Logistics

MES

Automobile company MES system application
Vehicle, engine assembly, etc.

Factory MES system application
Automatic production line SMT patch, etc.

CNC machine & HMI



Medical Detection Device

KMDA-New Arrival

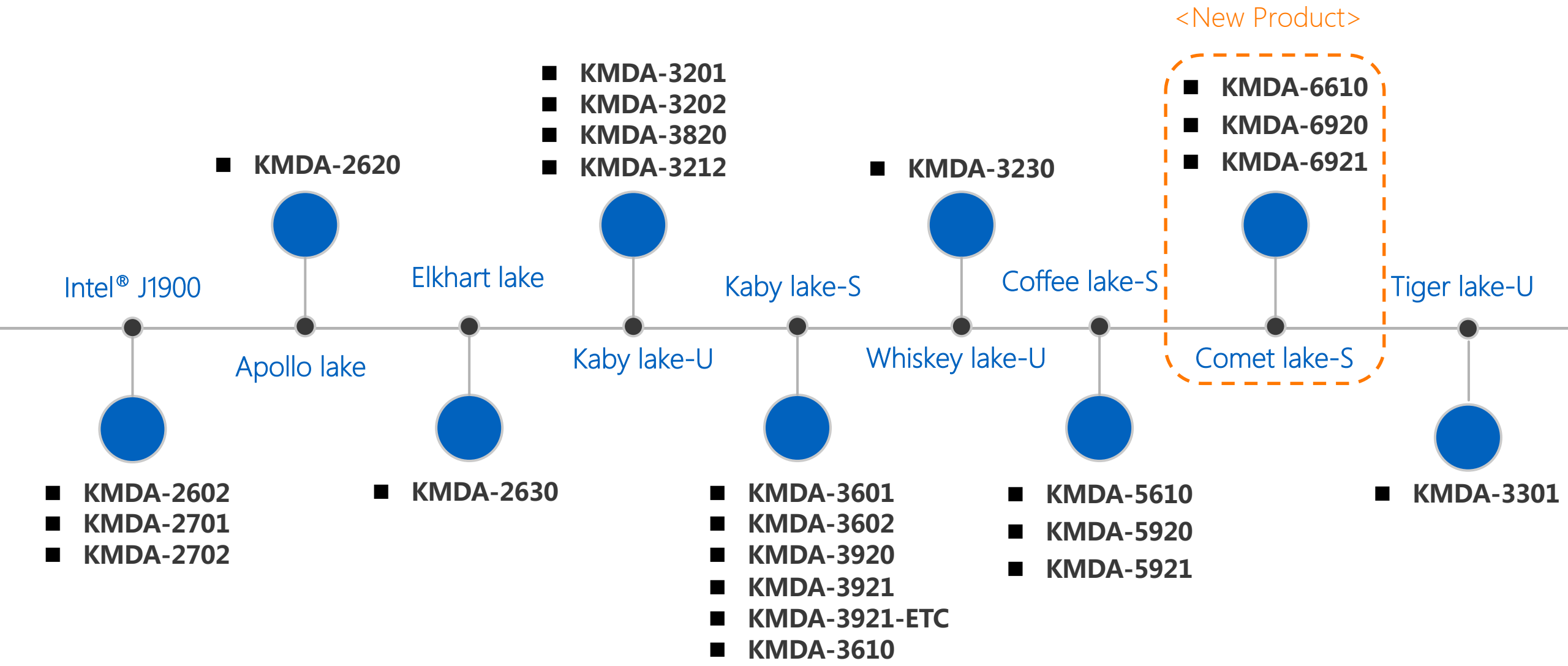
Fanless embedded box computer

JHCTECH

The IIOT standardized platform,real-time interconnection,
low latency, wide coverage,high-speed connection

KMDA-6610 KMDA-6920 KMDA-6921

KMDA ROADMAP



KMDA-6610/6920/6921 Product Features

	KMDA-6610	KMDA-6920	KMDA-6921
Processor	Intel® 10th Comet Lake-S Core i9/i7/i5/i3/Pentium/Celeron		
Chipset	Intel® H420E Chipset		
RAM	2*DDR4 2933MHz SODIMM, up to 64GB		
Ethernet	1*Intel I226V，10M/100M/1000M/2.5G bps Adaptive，supports WOL 1*Intel I219LM，10M/100M/1000M bps Adaptive，supports WOL		
Display	Support 1*DP，1*HDMI，1*VGA，2+1display		
I/O Interface	2*LAN，4*USB3.2，2*USB2.0，1*8bit DIO，4*COM（2*RS232/422/485 through BIOS，2*RS232），1*Line out and 1*MIC， 1*PS/2，1*REMOTE SW，1*VGA+1*DP+1*HDMI		
Storage	2*2.5” SATA3 easy pluggable SATA bay, support max 6G bit/s transmission rate 1* full size mSATA		
Power supply	DC IN 9-36V，with short circuit, over voltage and over current protection		
Expansion	1*Full size Mini-PCIe with SIM slot（support 4G LTE/Wifi/BT）	1*PCIe X16 slot（X16 signal） 1*PCIe X16 slot（X4 signal）or 1*PCI（32bit） 1*full size Mini PCIe with SIM slot（support 4G LTE/Wifi/BT）	1*PCIe X16 slot（X16 signal） 1*PCIe X4 slot（X2 signal） 2*PCI slot（32bit） 1*full size Mini PCIe with SIM slot（support 4G LTE/Wifi/BT）

Multi-threaded Compute

UP TO 18% PERFORMANCE IMPROVEMENT

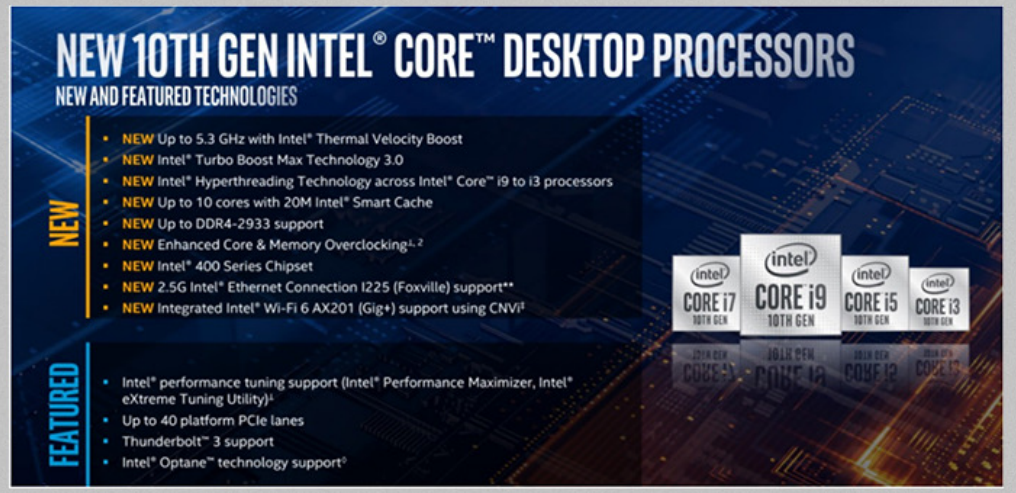
Windows application

UP TO 8% PERFORMANCE IMPROVEMENT

COMET LAKE -S

VS

COFFEE LAKE -R



KMDA-6610

The data comes from official Intel website

★Highlight2 Universal Expansion Capability

Model	Expansion	Supported GPU cards	Optical Interface Card Multiple Network Interface Card	Motion Control Card Data Acquisition Card Other Function Card
KMDA-6920-S001	1*PCIe X16 slot (Gen3.0 X16 signal) 1*PCIe X16 slot (Gen3.0 X4 signal) **or** 1*PCI (Gen3.0 32bit)	 • Supports up to 1*150W GPU graphics card (such as GTX-1660S, RTX-3060Ti, etc.) • The length should be less than 210mm • Support 1*75W AI function card • The length should be less than 230mm	 Can support a 10G optical Interface card or multi-network Interface expansion card with a size less than 230mm	 Can support 1 serial card with size less than 230mm, etc.
KMDA-6921-S001	1*PCIe X16 slot (Gen3.0 X16 signal) 1*PCIe X4 slot (Gen3.0 X2 signal) 2*PCI slot (Gen3.0 32bit)	 • Supports up to 1*150W GPU graphics card (such as GTX-1660S, RTX-3060Ti, etc.) • The length should be less than 210mm • Support 2*75W AI function card • The length should be less than 230mm	 can support 2x 10G optical Interface cards or multi-network Interface expansion cards with a size less than 230mm	 Can support 2*75W functional modules, such as motion control card, data acquisition card, digital input and output card, etc.; the length should be less than 230mm

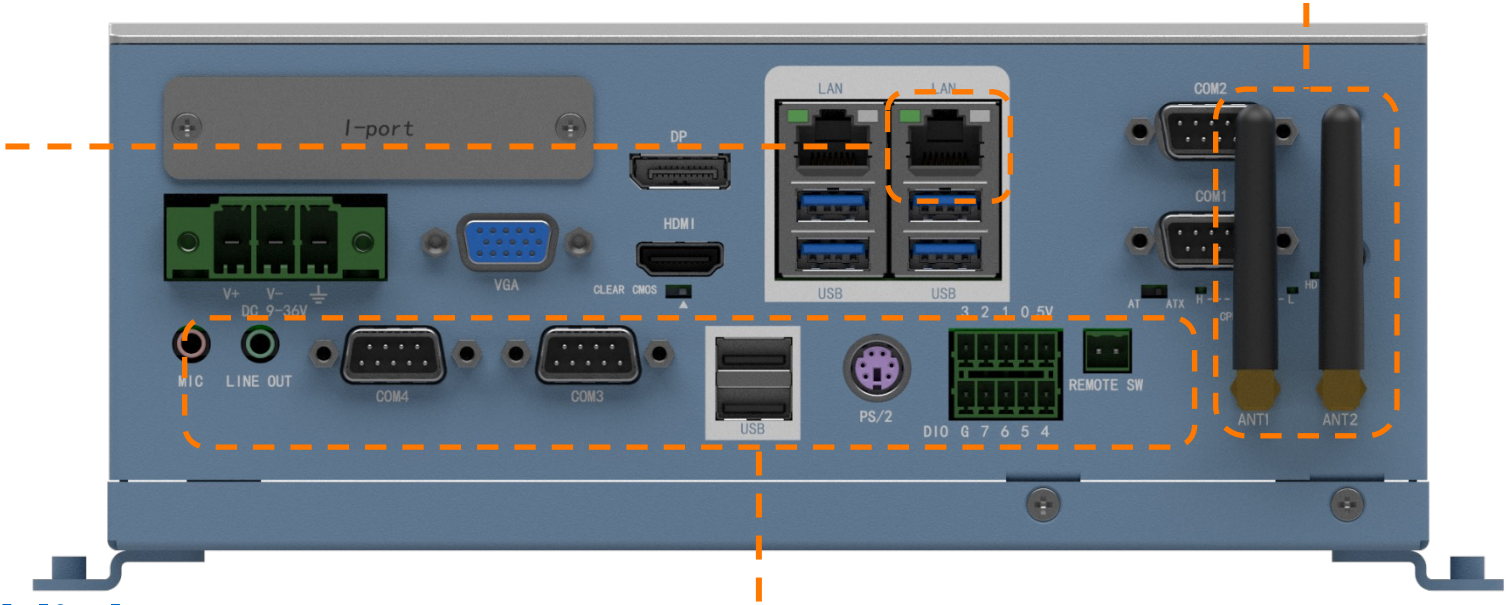
★ Highlight 3

2.5G Network

1*I226V and 1*I219LM Network Chip

Mini PCIe

Support 4G LTE or WIFI wireless network



★ Highlight 4

Flexible and diverse functional IO expansion

IO daughter card ECD-9720, optional for ECB-9620, ECD-9600 and ECB-9810IO

★ Highlight 4 Common Mode Structure, New ID Design

- Two platforms "Coffee lake" and "Comet lake" share the same heat dissipation extrusion profiles;
- The appearance ID and size of the corresponding models of the two sub-series are the same.

KMDA-5610

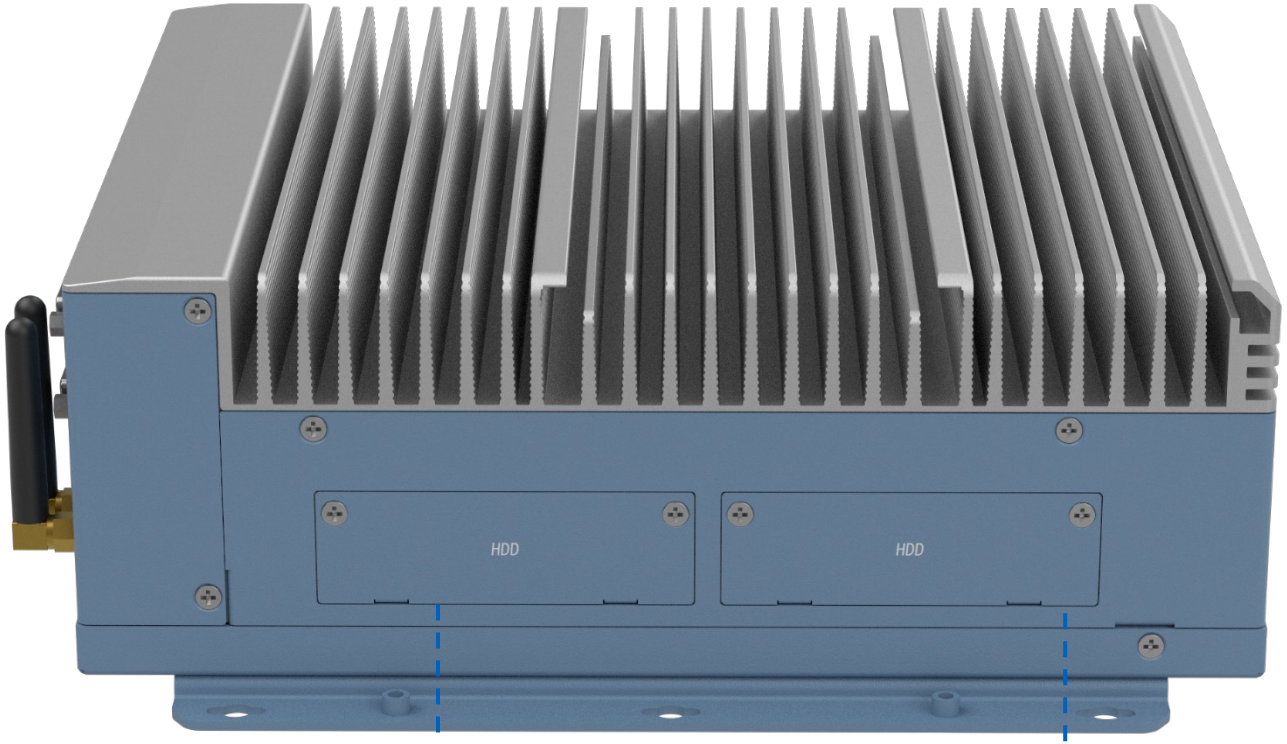
KMDA-5920

KMDA-5921

KMDA-6610

KMDA-6920

KMDA-6921



2x 2.5-inch easy-swap design hard disk bays, single-port rate SATA36.0 Gbps, the maximum capacity of a single hard disk can reach 6TB

1*mSATA, full-length card, rate SATA36.0Gbps

Highlight 6

1+2 storage options and higher storage capacity

Ordering Info of KMDA-6610

Model No.	Introduction
KMDA-6610-S001	Fanless box computer, Intel® 10th Gen Cometlake LGA1200 CPU, H420E PCH, 2*DDR4 SODIMM, 2*LAN, 4*USB3.2, 2*USB2.0, 1*PS/2, 4*COM, 1*VGA, 1*DP, 1*HDMI, Audio Line out & Mic, 8bit DIO, 1*I-Port, 2*2.5" SATA bay, 1*mSATA, 1*Mini PCIe, DC 9-36V.
PA-120DC19	AC/DC power adapter, DC 19V/6.32A,120W

Ordering Info of KMDA-6921

Model No.	Introduction	Expansion
KMDA-6921-S001	Fanless box computer, Intel® 10th Gen Cometlake LGA1200 CPU, H420E PCH, 2*DDR4 SODIMM , 2*LAN , 4*USB3.2 , 2*USB2.0 , 1*PS/2 , 4*COM , 1*Mini PCIe , 1*mSATA , 1*VGA , 1*DP , 1*HDMI , Audio Line out & Mic , 8bit DIO , 1*I-Port , 2*2.5 " SATA bay , DC 9-36V.	Standard configuration: ECX-266 four expansion card, 1*PCIeX16 (X16 signal) +1*PCIeX4 (X2 signal) +2*32bit PCI
PA-120DC19	AC/DC power adapter , DC 19V/6.32A, 120W	
PA-220DC24	AC/DC power adapter , DC 24V/9.17A, 220W	
PA-300DC24	AC/DC power adapter , DC 24V/12.5A, 300W	

Ordering Info of KMDA-6921

Model No.	Introduction	Expansion
KMDA-6921-S001	Fanless box computer, Intel® 10th Gen Cometlake LGA1200 CPU, H420E PCH, 2*DDR4 SODIMM , 2*LAN , 4*USB3.2 , 2*USB2.0 , 1*PS/2 , 4*COM , 1*Mini PCIe , 1*mSATA , 1*VGA , 1*DP , 1*HDMI , Audio Line out & Mic , 8bit DIO , 1*I-Port , 2*2.5 " SATA bay , DC 9-36V.	Standard configuration: ECX-266 four expansion card, 1*PCIeX16 (X16 signal) +1*PCIeX4 (X2 signal) +2*32bit PCI
PA-120DC19	AC/DC power adapter , DC 19V/6.32A, 120W	
PA-220DC24	AC/DC power adapter , DC 24V/9.17A, 220W	
PA-300DC24	AC/DC power adapter , DC 24V/12.5A, 300W	

Target Market

01

Highway

- Gantry Free Flow
- ETC & MTC
- Event Detection
- Law enforcement forensics

02

Machine Vision

- Logistics Visual Sorting
- Photovoltaic visual inspection
- Intelligent inspection machine
- Automobile manufacturing inspection

03

Medical Imaging

- X-ray machine
- Monitor

04

Industrial Manufacturing

- Industrial Robot Arm
- Laser cutting machine/engraving machine/CNC machining center
- Dispenser/3D Printer
- DCS

05

CVIS/ V2X

- Roadside MEC
- HD Map mapping

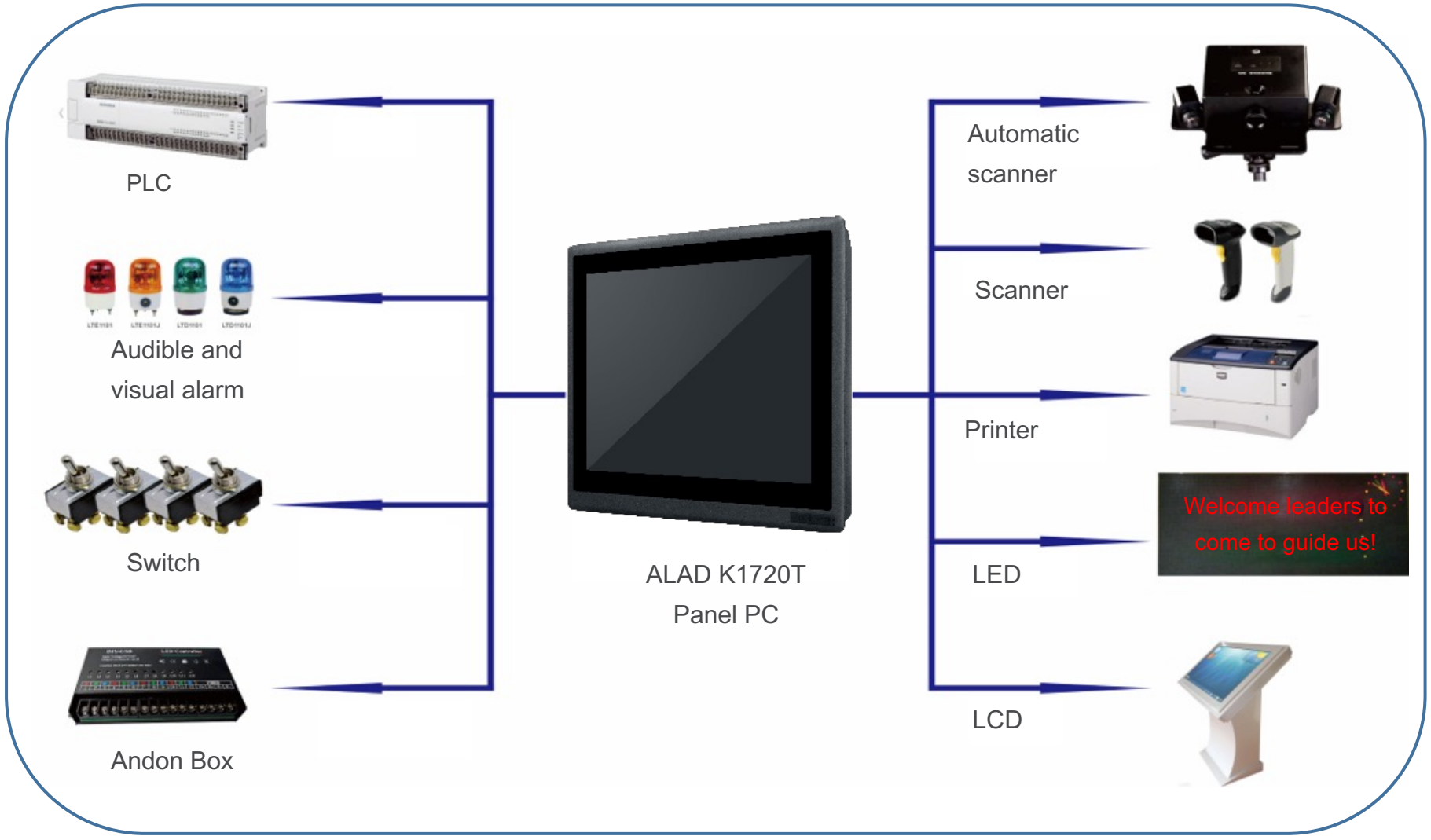
KMDA-6610/ 6920 / 6921 Schedule

EV Phase	**Late August 2022**
PV Phase	**October 2022**

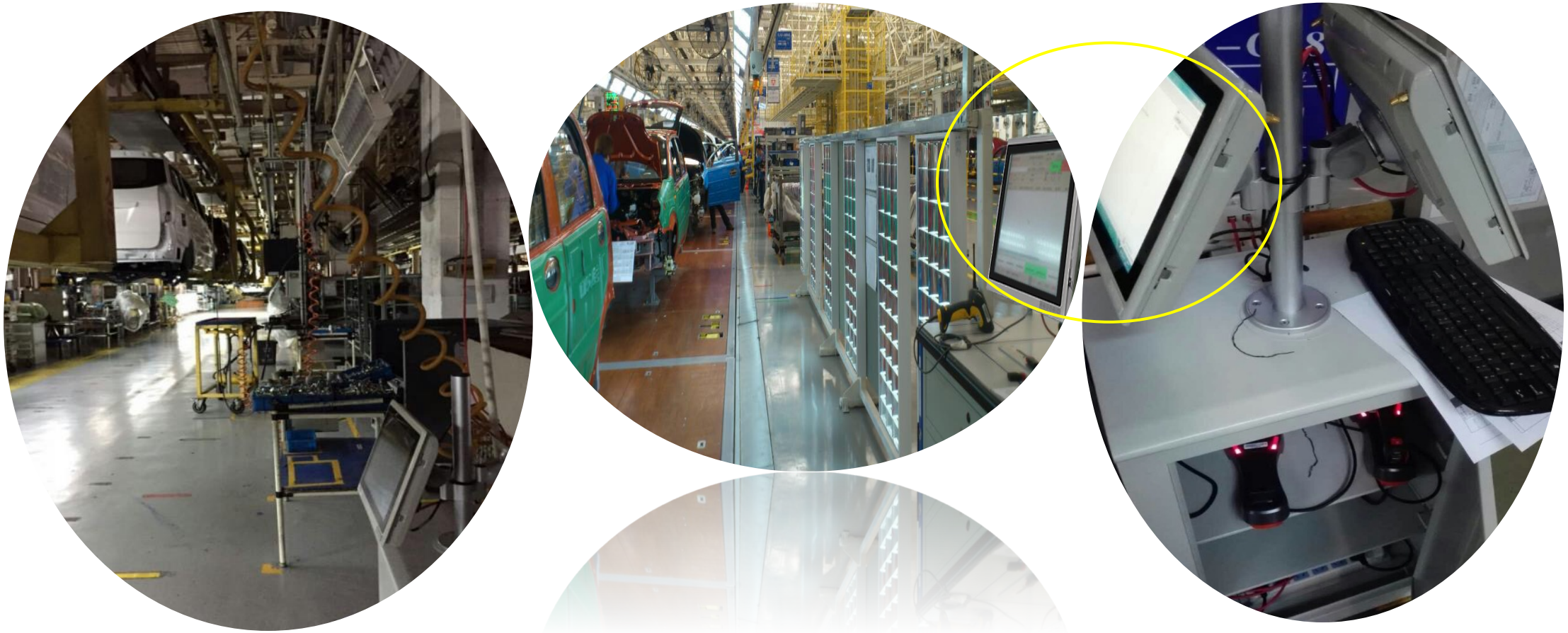
JHCTECH | IoT Computer Connecting the Dots

Smart Manufacturing Solutions

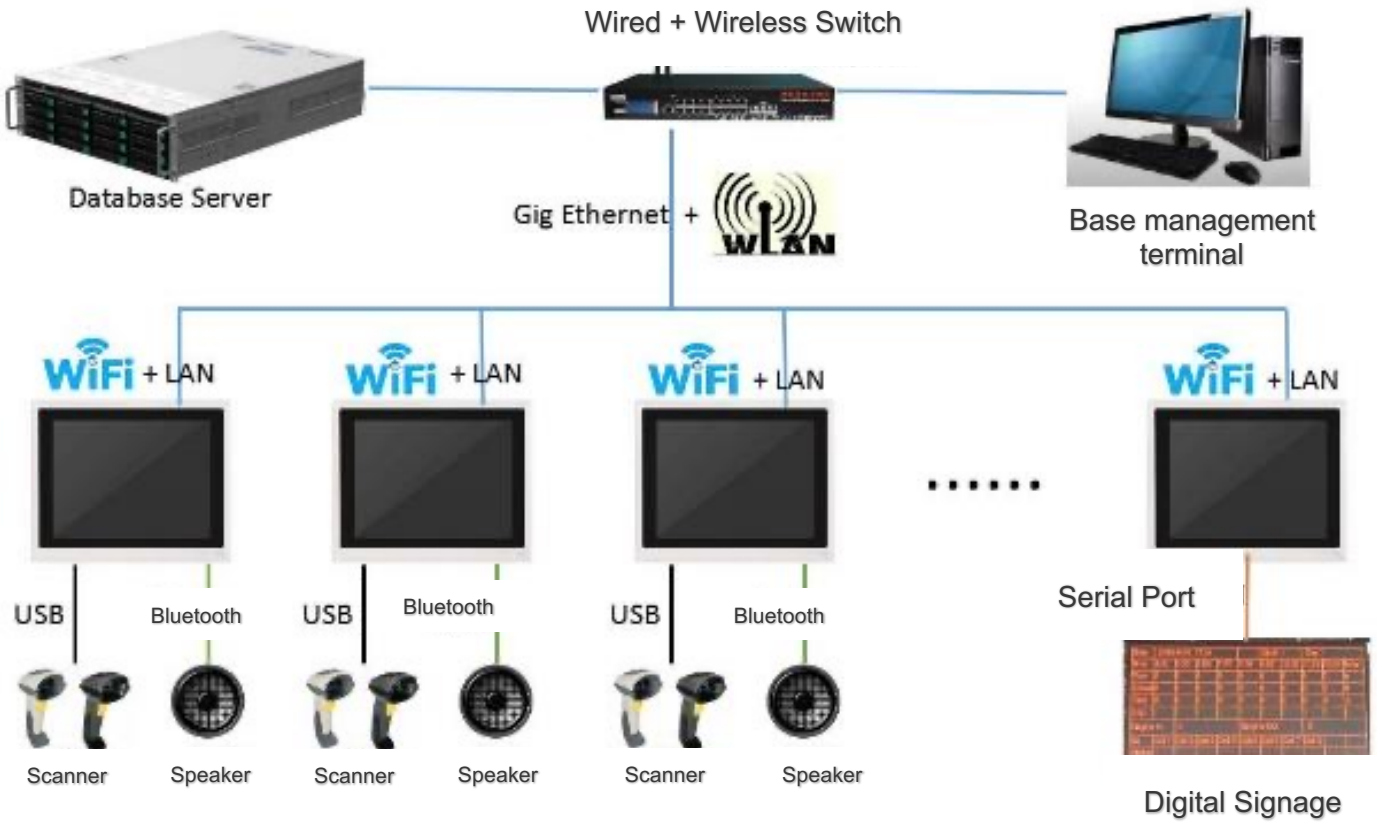
Application: MES (Manufacturing Execution System)



Application: MES(Manufacturing Execution System)



Application Case



An automobile company in Liuzhou introduced the mixed-flow assembly line sequencing problem into the MES system and combined it with the genetic algorithm to realize the optimal solution of the manufacturing execution system for automobile assembly, and relying on the most reliable interactive hardware of the JHCTECH platform to run.

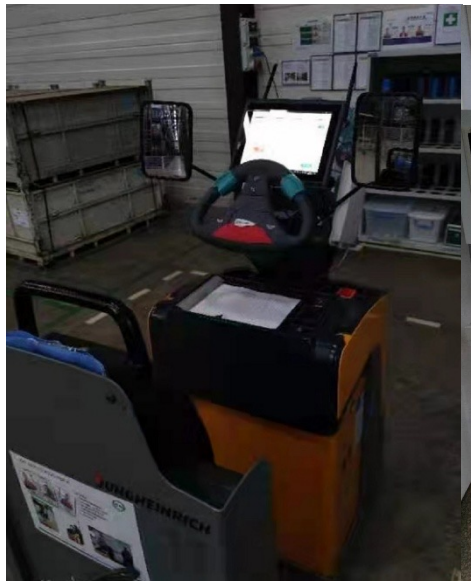
System configuration

1. Enterprise ERP/SCM/CRM system data center
2. Wired & wireless TCP/IP data switches
3. Manufacturing Execution System MES
4. Industrial touch panel PC + data collector + amplifier speakers, material billboards

On-Site Implementation

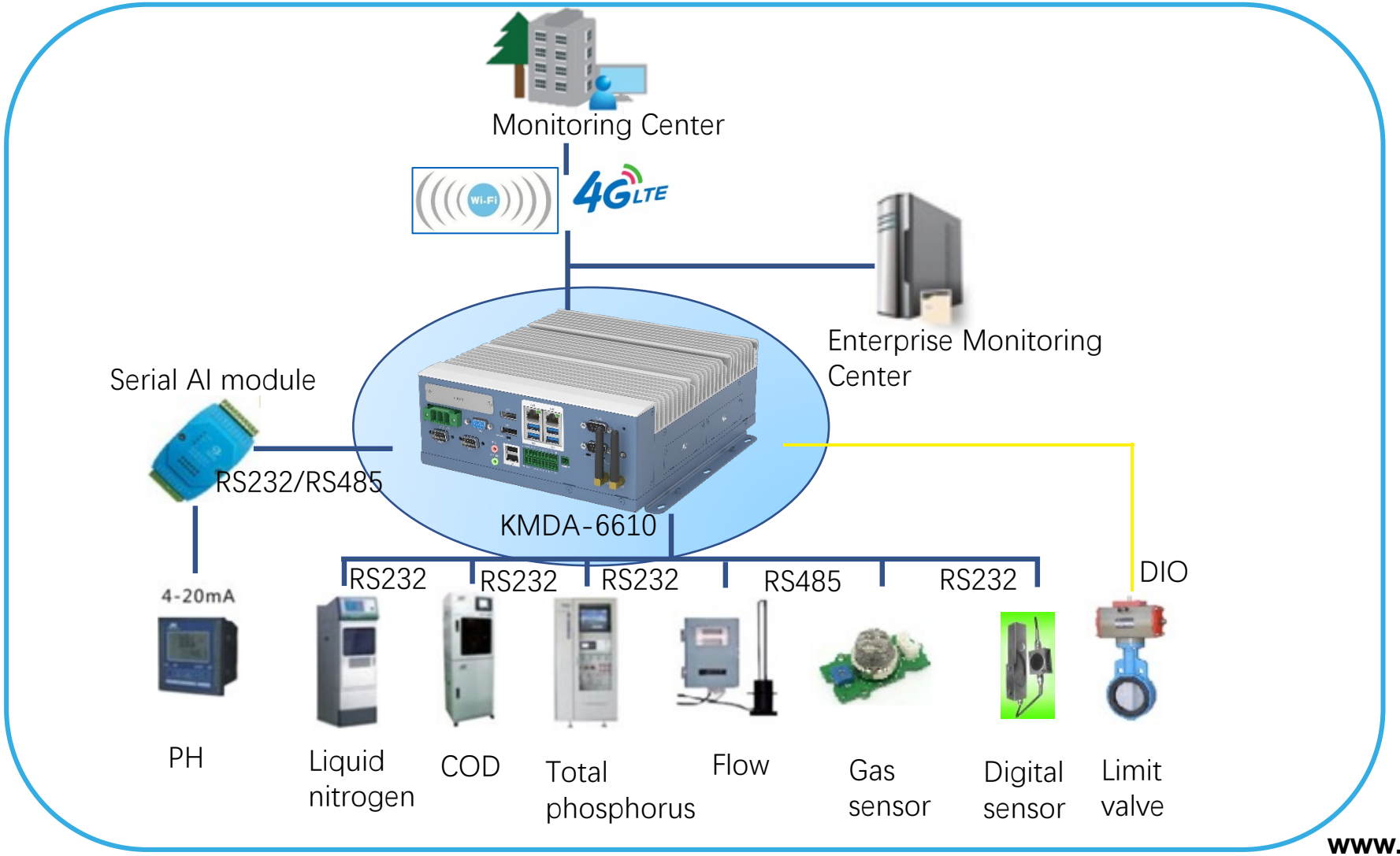








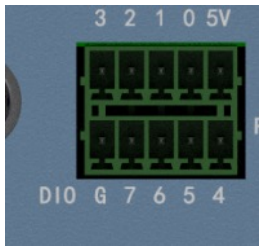

Application-SCADA(Supervisory control and data acquisition)



Application-SCADA(Supervisory control and data acquisition)

KMDA-6610 Features

DC 9-36V, short circuit, overvoltage and overcurrent



8bit non-isolated DIO, TTL signal, programmable

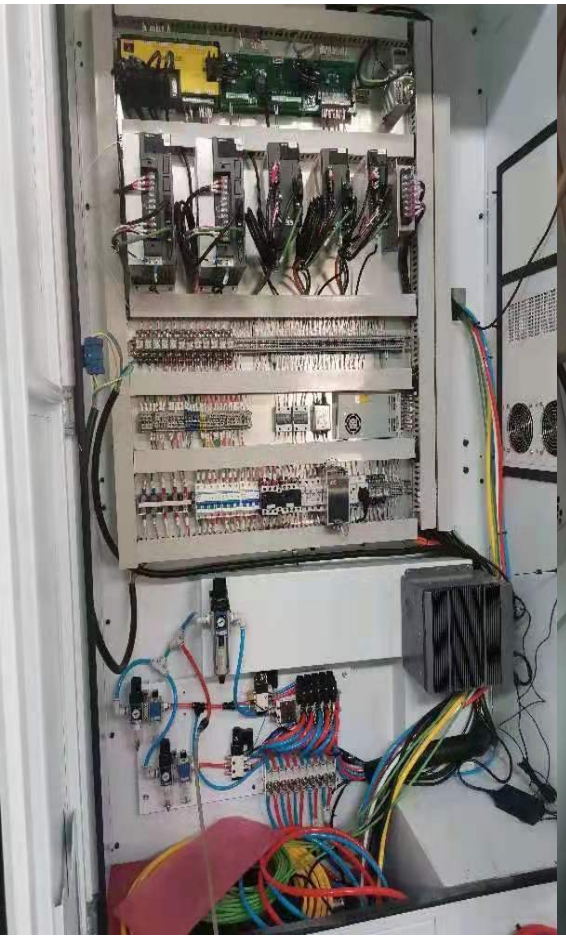
Fanless, low power consumption

4*COM
2*RS232/422/485
2*RS232

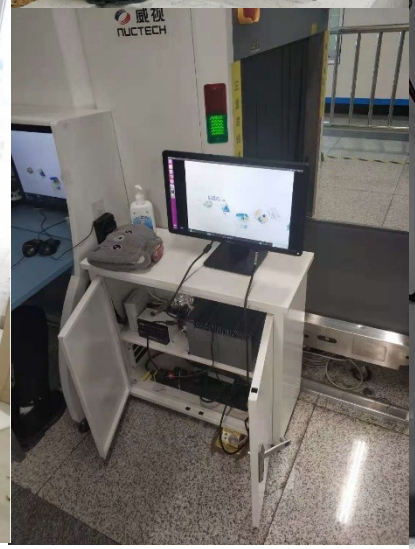
-20~60C°, Wide operating temperature

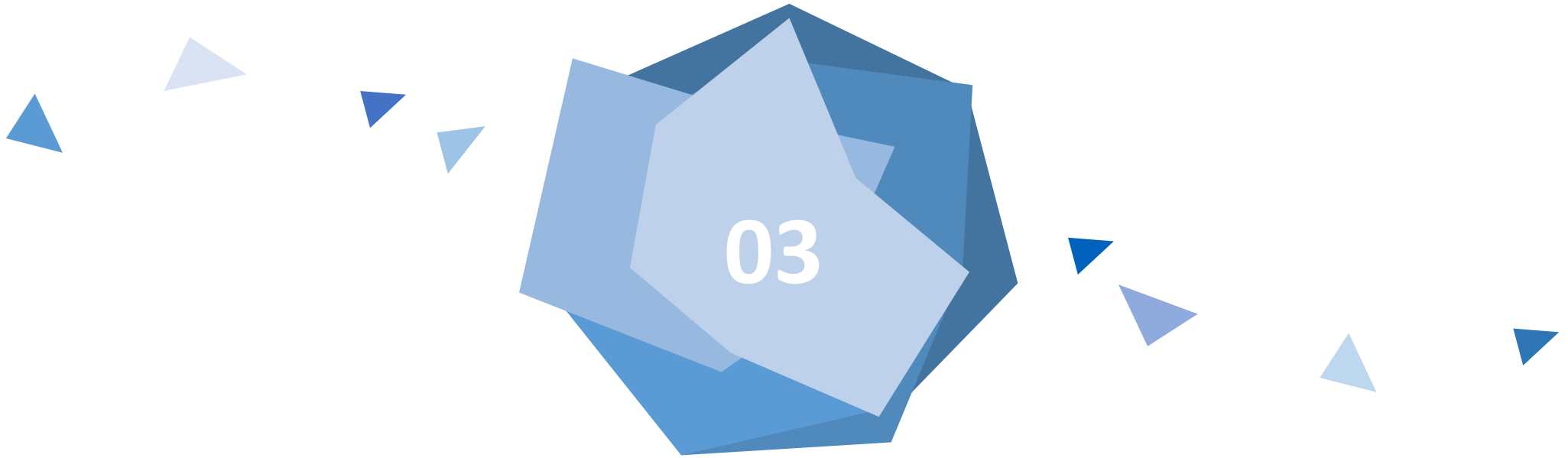
Support 4G LTE or WIFI wireless network

On-Site Implementation







Q&A

Q1: What is the maximum number of PCIE slots the KMDA series have?

A1: We provide 2, 4 slots selection in KMDA-5000/6000 series

KMDA-5610

KMDA-5920

KMDA-5921

KMDA-6610

KMDA-6920

KMDA-6921

Special Offer for JHCTECH ALAD Series

Model	Special Offer
ALAD-A1001T/S001-G 4 GB RAM, adapter.	333 USD
ALAD-K1520T/T002-G 4 GB RAM, adapter.	777 USD
ALAD-K2120T(P)/T002-G 4 GB RAM, adapter.	999 USD

Offer conditions:

1. The above configurations do not include hard disks.
2. The offer is valid only for this webinar attendees. (Please fill in the form to get your offer first. Form link: https://jhctech.ck.page/856aba9d36)
3. The offer validity period runs from Sep 30th, 2022, to Oct 30th, 2022.
4. No limit to the number of purchased units.
5. Offer valid while stocks last. Please get in touch with JHCTECH regional sales manager for more details.
6. JHCTECH reserves the right of final approval for this commercial offer.

Special Offer for WellinTech Softwares

Offer conditions:

1. The offer is valid only for this webinar attendees. (Please fill in the form to get your offer first. Form link: https://jhctech.ck.page/856aba9d36)
2. The offer validity period runs from Sep 30th, 2022, to Oct 30th, 2022.
3. WellinTech reserves the right of final approval for this commercial offer.

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